

THE GOSPEL / ACCORDING TO DARWIN









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"The heavens declare the glory of God; and the firmament sheweth his handiwork.

Day unto day uttereth speech, and night unto night sheweth knowledge.

There is no speech nor language where their voice is not heard."—PSALMS xix. 1-3.

"For when the Gentiles, which have not the law, do by nature the things of the law, these * * are a law unto themselves: which shew the work of the law written in their hearts."—ROMANS ii. 14

"And as Natural Selection works solely by and for the good of each being, all corporal and mental endowments will tend to progress toward perfection. There is a grandeur in this view of life, with its several powers having been breathed by the Creator into a few forms as into one; and that while this planet has gone cycling on according to the fixed laws of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been and are being evolved."—DARWIN. (Origin of Species).

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THE GOSPEL

ACCORDING TO DARWIN

BY

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TO

MY WIFE,

WITHOUT WHOSE SYMPATHY AND

ASSISTANCE

THIS LITTLE VOLUME

COULD NOT HAVE BEEN WRITTEN.



PREFACE.

The purpose of a preface is twofold. First, to disarm, in advance, the criticism of the reader—not to mention the reviewer. Second, to explain what the author would have done—if he could.

To the former end I wish simply to say that it is in no sense the purpose of this little volume to furnish a system of ethical or religious thought, or the germ of a new religion, as perhaps its title might lead some to infer, least of all to enunciate truths which are original with, or peculiar to its author. It is merely an attempt to get a bird's-eye view of a few of the influences affecting human hope and human happiness from the standpoint of that view of and attitude towards the universe which is best expressed by the term Darwinism.

This term is not used of course in the narrow sense of the personal views of Charles Darwin in contrast with those of other evolutionists, be they his predecessors or his successors, but simply as typifying the evolutionary movement and its wonderful consequences by the name of its greatest thinker and ablest champion, who first made the theory of evolution credible or even think-

able.

Its effort is to show that this attitude possesses a broad and secure basis for courage and happiness in the present and hope for the future.

VII

In other words, that its faith is as steadfast, its "consolations" as great, and its spirit of worship as profound and as powerful as those of revealed religion. That the message of the gospel according to Darwin, is in truth "good news," "glad tidings; that the natural is as wonderful, as

beautiful, as divine, as the supernatural.

It is no longer necessary to limit our worship to the mysterious. No conception of Heaven, which has ever been formed, represents as great an improvement upon the existing state of affairs as has occurred every two thousand years in the actual history of the race. A triumphal, upward march, unbroken for fifty million of years, and which still continues, in which we are keeping step, every day, is at least as worthy of our gratitude, our worship, our trust, as anything supernaturalism has to offer.

Far from destroying or antagonizing the religious instinct, the spirit of worship, Darwinism broadens and quickens it. But while recognizing its wonderful value, and according it a high rank in the parliament of instincts, it absolutely declines to recognize it as perpetual dictator.

Religion is but one of several great influences which make up human life and determine human conduct. Like any other instinct, indulged in the proper place, it is beneficent, ennobling in its results; but carried into spheres where it has no authority, it becomes injurious and degrading. Darwinism has no quarrel with religion, only with its excesses.

University of Buffalo, April, 1898.

CONTENTS.

CHAPTER I.

THE FIFTH GOSPEL.

Supposed Irreligiousness of Darwinism—Broader and Truer Basis for Worship—View of the Power of Good and Evil-Progress thro' Conflict—New Aspect of Pain and Death— Happier and more Hopeful World-view.....

CHAPTER II.

THE OMNIPOTENCE OF GOOD.

Man's Conceptions of the World-Spirit: Worship of Evil as Supreme—Worship of Evil and Good as Equal—Worship of Good as Supreme—Supremacy of the Good among Physical Forces—Supremacy of the Good among Vital Forces—Supremacy of the Good among Moral Forces—Disappearance of Evil Deity—Unthinkableness of Absolute Evil....

CHAPTER III.

THE HOLINESS OF INSTINCT.

Supposed Duality of Man's Nature—The Relativity of Sin—Any Impulse followed to Excess Immoral—Instinctive Origin of the Moral Sense—Our Virtues Older than we are —Value of Instinct as a Guide in Health—Value of Instinct as a Guide in Disease—The Naturalness of Morality......

CONTENTS.

CHAPTER IV.

THE BEAUTY OF DEATH.

Misconceptions of Death—Death as a Factor in Progress—	
Dependence of Life upon Death—Death as an Economist—	
Painlessness of Death—"There is a Time to Die"	5

CHAPTER V.

LIFE ETERNAL.

I	Injurious Effects	of Belief	in a Fu	ture Lit	ie—The	Ruin of
	Hamlet—The Bi	tterness	of Death	the Dre	ad of a	a Future
	Life-Origin and	Develop	nent of the	he Idea o	f an Af	terworld
	Happy Hunting	Ground-	-Olympu	s-Valha	ılla—Pa	radise-
	Nirvana-Heave	n. The	rue Zωή	αὶώνιος		

CHAPTER VI.

71

96

LOVE AS A FACTOR IN EVOLUTION.

THE AT A DOMEST OF THE COLUMN ASSESSMENT OF TH
The Natural Origin of Love—The Great Forces of Attraction
and Repulsion—Combination in the Physical World—Com-
bination in the Planet World—Combination in the Animal
World-Affection Necessary for any high Development-
Love the Basis of Intelligence—Mammals Highest and Most
Affectionate—The Pack, the Cattle-Herd, the Horse Mob
-Affection in the Training of the Dog and the Horse-
Hatred Makes Savagery—Law Makes Civilization

CHAPTER VII.

COURAGE THE FIRST VIRTUE.

Neglect of Courage by Christian Ethics—Fatal Effects of the Cowardice of the Good—Courage the Glory of Calvary— The Worship of Courage—Need of an Extra Christian Code 133

CHAPTER VIII.

THE STRENGTH OF BEAUTY.

Misconception of Beauty as Weak-Strength of the Sun-	
light, the Grass, the Birds-Beauty a Mark of Purity and	
Vigor-No Life without Color-Outlines of Beauty and	
Health Identical—Beauty "Goes to the Bone"—One of the	
Noblest and Safest Aims of Life	14

CONTENTS.

CHAPTER IX.

THE BENEFITS OF OVERPOPULATION.

Pressure of Population the Mainspring of Progress—Density	
of Population a Test of Civilization-Competition the	
Mother of Invention—Cities always the Leaders of the	
World—The Collapse of the Malthusian-Theory Bubble 16	6

CHAPTER X.

THE DUTY AND GLORY OF REPRODUCTION AND ECONOMICS OF PROSTITUTION.

Outlawry of the Sexual Impulses by Morality —Reproduction	
the Foundation of Morality-The Training of Parents-	
Ignorance of our Sexual Functions Immoral—Evil Effects	
of Limiting Size of Families-Origin of Prostitution-Char-	
acter of Women Involved-Effect upon their Fertility and	
Longevity-Value of Alcohol as an Eliminator-Prostitu-	
tion a means of Sterilizing the Unfit	180

CHAPTER XI.

THE VALUE OF PAIN.

Pain	Necessary	to Life and	Progress-Value o	f Inflamma-	
			sease—Pleasure Imp		
011	t Pain—Dis	comfort as a	Factor in Progress	-Discomfort	
the	Mother of	Science			200

CHAPTER XII.

LEBENSLUST.

Joy	as	an	Aim	in	Life—Essential	Nature	\mathbf{of}	Pleasure—	
Jo	y—I	Iar	mony	wi	th Environment	-A "Li	fe of	f Pleasure "	
ne	ecessa	aril	y Mor	al-	-Natural Impuls	ses balan	ce e	ach other—	
PI	69 811	re s	Stim	mlr	s to Adventure a	and Vigor			222



THE GOSPEL ACCORDING TO DARWIN

CHAPTER I.

THE FIFTH GOSPEL.

EVERY revelation granted to man is at the outset denounced as atheistic and sacrilegious. The flash that follows the "Let there be light" sadly changes the faces of the gods, whether they be the Dagons born of man's fingers, or the Dogmas of his fancy, as they stand in their twilight shrines, thick with the smoke of incense or hazy with the "dim religious light" of mystic contemplation. Not only this, but the dazzling glare pains to the blinding-point the eye of faith, until the familiar features, nay, even the majestic outlines of the Divine Form seem utterly lost, and it is little wonder that the shuddering cry goes up, "Great Pan is dead!"

The instant impulse, almost too strong to be resisted, is to turn the back upon the light which has wrought this havoc, declare it a bale-fire, an *ignis fatuus*, a lying illumination, and thus save both eyes and theology. There is plenty of darkness left to construct another shrine. And this is the course usually taken, in point of fact; but is it wisest, not

to say bravest, or manliest? Whoever follows it, proves himself to have been worshipping, not the Deity, but his own pet conception of Him; Light cannot alter Being, only its appearance. And yet "Thou that destroyest the law and the prophets" is the denunciation hurled at every new light-bringer.

A courageous few, however, turn and unshrinkingly face the dazzling ray of golden sunlight, which has shot unbidden across the purple twilight of the sanctuary, proudly secure that whatever is true cannot be altered, whatever is untrue is unworthy of their homage. As ever the bravest course is the happiest, and although the shrine is seen shattered and empty, while the rich vestments, brain-woven and fancy-dyed, with which, with unconscious irony, divinity has been "adorned," lie folded upon the floor like the grave-clothes at the feet of Lazarus, yet the roof is found to have been but a veil of twilight and shadows, and heaven above is revealed.

And as their glad eyes gaze up into the sapphire, star-sprinkled vault, they are again aware of a Presence of far lovelier, though vaguer outline, and though more remote, of a grandeur never before conceived.

This is peculiarly true of that great burst of eternal truth which broke upon the world chiefly through the work and genius of Charles Darwin. Its dawning was heralded by a shudder and a shriek from every pew and pulpit, and "Darwinism" became a synonym for blasphemy. Its truth was vehemently denied, its logic mercilessly ridiculed, its "debasing tendencies" furiously denounced. It was to be

given no quarter, for if tolerated for a moment it would utterly destroy every vestige, not only of religion, but of the religious spirit, and yet I venture to herald it to-day as the long-missing "Fifth Evangel," "The Gospel according to Darwin." Instead of destroying the religious spirit, it reanimates it, and places it upon stronger foundations than ever before.

This may seem an extravagant and extraordinary statement, but it can be shown to be far from unfounded. In the first place, it restores the grand unity of the universe, and proves the fundamental harmony of its conflicting forces. There is no hanging in the balance between the forces of good and evil, no perilous and often doubtful conflict between a beneficent World Spirit and a malevolent one: no such thing as abstract or essential "evil": nothing but a magnificent scheme of glorious progress through conflict. Storm and darkness, hunger and cold, war and wanderings, nay, even pestilence and famine, are seen to be spurs to progress, mothers of invention, and the stern nurses of all the virtues. Never has the doctrine of the Old Gospel that "all things work together for good to them that love the Good" received such tremendous endorsement. Instead of gazing upon a world of blind, remorseless chance, or inevitable fate, so full of cruelty, injustice, and needless suffering, as to absolutely require the conception or invention of "another world," to even partially remedy its inequalities, the Darwinist sees all things and all forces moving steadily forward in one grand

and gloriously beneficent scheme of advancement. Nature's only and unvarying war-cry is "Excelsior!"

The old Evangelists did at times catch glimpses of this truth from the mountain-peaks of their loftiest spiritual raptures, but it was soon lost sight of, in the mist of the valley and fog of the fen, into which the churches were plunged in that palsied time which heralded the death of the great Roman Empire.

None of them, however, even dreamed of a light which should reveal a harmony and an order in that far more bitter, more hopeless and perplexing conflict which is incessantly present in the soul of man itself. Even to Paul's magnificent intellect, the only possible result is that one of the conflicting forces must and inevitably will utterly destroy the other. carnal mind is enmity against God, and is not subject to the law of God, neither indeed can it be. . . . To be carnally minded is death." In the mild radiance of the Fifth Gospel even this struggle, like every other, is seen to surely and inevitably result in progress, to which both forces are absolutely necessary. The "enmity" between them is merely that between the steam-chest and the driving-wheel in the great engine, or, more accurately, between the panting young giant in the cylinder and the piston-rod, each fiercely asserting itself against the other, and between them driving the great wheel. Browning has caught the same ray of dawn when he cries:

"As the bird wings and sings
Let us cry, "All good things
Are ours, nor soul helps flesh more, now, than flesh helps soul."

Our passions and appetites are seen to be the great driving forces of our nature, and even the term "animal," as applied to them, carries with it no stigma of degradation; on the contrary, it suggests much that is brave, faithful, and self-denying. By far the longest, and not by any means the least noble part of our pedigree lies outside of the human family.

One of Darwin's greatest services was the proving that our moral impulses are derived, not from education nor external revelation, nor from the cold calculations and experimental deductions of "refined selfishness," according to either Bentham or Spencer, but from the warm and beautiful family affections, those ties of blood, whose golden links are alike binding upon the dove upon its nest, the deer in its covert, the lioness in her lair, and the mother by the hearthstone. The courage, the patience, the cheerfulness, the affections, that are in us are just as essentially "carnal" as are the "lusts of the flesh" and the "pride of life," and what is more, are more numerous and more powerful. Our deepest and strongest instincts in the long run are found to be on the side of right.

The most exquisite result of this perception is a delicious sense of harmony and sympathy with nature and all that she contains. The world is no longer either "vile" or "unfriendly" in either its human or its physical aspects. "The Prince of the Power of it" has disappeared; all men of all races, become brethren upon the common ground of the great, noble, primitive instincts, and even the beasts of the field

and the fowls of the air are glowing with that "touch of nature" which "makes the whole world kin." The only thing in it that we could profitably alter is our own conceited, babyish selves.

Another proof of the inspiration of the Fifth Gospel is the calm and rational view which it enables us to take of death. To remove the fear of this has been a leading aim of all former revelations, but it is to be doubted whether they have not the rather intensified it, as they all unite in characterizing it as the King of Terrors, the bitterest of evils, and the great enemy of the race.

The new light pierces these grisly, ghostly draperies, woven of fear and darkness, and shows behind them a gentle, painless, grandly-beneficent process of nature, by which the old is tenderly and reverently laid away to dissolve and reappear in the new.

Bracken dies and enriches the mold so that the anemone, violet, and the primrose may lift their dainty heads and scatter their perfume through copse and glen. Here is the Resurrection of the Body. Nothing is lost, but much is gained by the change.

The Mexican aloe lives a century, scatters its myriad seeds, then peacefully fades and dies, but its seeds take root upon its very grave, and give birth to other winged seeds, and so on through thousands of centuries. The vital spark has never once gone out, but burns with a brighter, richer, intenser glow in each succeeding generation. The primitive aloe is still alive and in a fuller, richer sense than ever before. This is Life Eternal, and what is better, Life Improving.

Is not this a nobler, higher, more unselfish conception than that of an indefinite prolongation of our own petty, personal existence? This is an immortality worth having, for it provides for progress.

We are immortal physically, in the course of nature, and mentally and morally in our influence, so far as this is for good. All that is true, all that is good, in us and in our influence, will survive to all the ages; all that is false and base will be ruthlessly crushed and destroyed, ground into powder by the mills of the gods. It is not a question of whether we, as a whole, will be "saved" or "lost" but of how much of us.

Even if I have been heard this far without indignant interruptions, a dozen voices which can no longer be restrained, now burst out with the question, "But what possible claim to the title of a 'Gospel,' a 'Good News,' can be made by a revelation, the chief factor and very essence of whose 'plan of salvation' is a fierce conflict of physical force, a contest of tooth and claw, in which of necessity mere brute strength and selfishness must prove the victorious qualities?"

But is this last apparently self-evident conclusion, a logical one? It most emphatically is not! And further, strange as it may seem, is flatly contradicted by the facts. Not only has the decrease of selfishness and the growth of the affections been one of the most prominent features in the upward development of the forms of being, but it has also been a most important factor in that progress. The supremacy of intelli-

gence in the struggle for existence is universally admitted, and the chief training-school, if not the very birthplace of this intelligence, is in the care for others, first inspired by parental affection.

Nothing but the lowest degree of intelligence or development is possible without affection. The crocodile, the shark, and the viper are models, not only of cruelty and ferocity, but of stupidity and dulness. It is no mere coincidence that that great kingdom of living forms whose distinguishing and proudest characteristic is the possession of a milkgland (a purely altruistic organ) should far outrank all others in beauty, vigor and cerebral development. If they could be said to have any rivals in this last characteristic, it would be those patient but brilliant little toilers, the ants and the bees, whose whole existence is literally a slavery to, or martyrdom for, others.

War and conflict are extraordinary breeders of intelligence, but co-operation and protection are even greater. Not only are mammals far superior to all the other classes of life of living forms because they suckle their young, instead of leaving them to the tender mercies of the waves and the sun, but among them by far the most intelligent and most secure from hostile attack are those which group themselves together in more or less firmly-organized packs or herds.

Compare for a moment the dog, the horse, the elephant, with the tiger, the bear, the wild boar. Indeed an accurate classification of the intelligence

and perfection of living forms could be made upon the basis of the degree of care they take of their offspring, and of unselfish interest in their kind. The same truth holds good through the different grades of the human family itself. The mere fact that the weak cannot command justice, not only stamps any tribe as barbarous, but just as certainly keeps it so, and as we go down the scale, we finally reach a point where justice, humanity, and even family affection sink to the very lowest ebb, and with them inexorably culture, intelligence, and fighting power. The very name of the "man-of-the-woods," the "homo silvaticus," "salvage," "savage" has become a synonym for cruelty and ferocious indifference to the rights of others. The savage is the very incarnation of aggressive, remorseless selfishness, the beau ideal of the man most likely to "survive in the struggle for existence" according to popular and theological conception, but does that make him even the best fighting-man in the world? The question answers itself. A mere handful of civilized troops can scatter swarms of savage bowmen or even riflemen, simply by virtue of their confidence in one another. Selfishness is a great force, but affection is a greater. Sweetness, and light, and love, and beauty abound in the higher types, both animal and human, because they are emphatically the winning qualities in the upward struggle.

Stronger far than the crashing sweep of the hurricane or the thunderous rush of the storm-stirred Atlantic, keener and more penetrating than the blackest and bitterest frost, or the jagged spear of the lightning is the sweet, golden sunshine, the loveliest and the strongest thing in the world. Beauty and morality are abundantly able to take care of themselves in the fiercest struggle without any assistance from either academies or religions.

Let no one, however, imagine for a moment that a flabby æstheticism or weak amiability can fill the requirements for survival. Far from it. Valuable and powerful as are love and beauty, the one virtue which is absolutely indispensable, and separated from which they are of little avail, is courage; clear, indomitable, inexhaustible. Though the former are unquestionably the controlling and molding influences of progress, the latter is the great positive motive force. The one unpardonable sin is cowardice. Kind intentions, without the courage to carry them into effect, are of but little value either to their object or their possessor. Courage is not only the basis, but the very mother of the virtues. The thoroughly brave man is almost never cruel, treacherous, or untruthful. Its absence is not only the provoker, but the very essence of the majority of the vices. It is cowardice that literally makes the liar, the cheat, the traitor; courage, the Washington, the patriot, the reformer.

In spite of his harsh features and rude manners, this fierce, reckless, battle-loving, but warm-hearted old Titan is clearly the chief of all the virtues, instead of a creature to be ignored or even discountenanced, except in certain "moral" forms, as he is regarded in that effeminate mysticism which has grown up chiefly out of the Fourth Gospel.

One of the strongest claims to recognition of the Fifth Gospel is the light which it throws upon that problem, "The Origin and Relations of Evil." By its rays evil is seen, and can even be demonstrated to be mainly one of the necessary accompaniments of the development of Good into Better. If movement is to occur, it must be possible in all directions, and the power of advancing inevitably carries with it the possibility of retreat. The possibility of growth must include that of decay. Evil is the shadow thrown by the sunlight of the good. Good is positive and absolute, evil negative and relative. Almost every evil, viewed broadly and attentively, is seen to be at bottom mainly a relative or temporary absence of good, and in many cases, repulsive as it may be at first sight, to be ultimately beneficent in its nature.

More than this, much of what we term evil is a necessary part of the scheme of progress. To use a mechanical illustration, not only is falling an indispensable corollary of, or antithesis to, rising, but also an essential factor in forward motion. That incarnate poetry of motion, the flight of the lordly eagle, consists of a quick, short dash, with a few score strokes of his powerful wings to a dizzy height, followed by a circling, swooping, triumphant descent on motionless, outstretched pinions, a veritable riding upon the wings of the wind, covering half a countryside in its sweep. Here progress is attained, not so

much by the rise, as by the long, sweeping descent which follows it, and both movements are alike indispensable.

To soar aloft merely to brave the eye of the sungod, or to excite the admiration and reverence of the rest of the feathered tribes, as the classic myth of the kingly bird supposes, would be simply a fruitless and foolish waste of energy; and yet in the spiritual realm, many a pinnacle of saintliness, many a state of ecstasy, has been attained from highly similar motives, and proved equally barren of results. Much of what we term absolute good would be sterile unless mixed with apparent evil. The whole process of human locomotion, not only physical but mental, is literally a series of interrupted falls. Our only chance of advancing is to fall in the right direction and keep at it. Our only struggle should be, not to avoid falling, but to fall forward.

Of all the innumerable forms of evil probably none is so obtrusively self-evident, or so universally denounced and deplored by philosophers of every system, priests of every creed, and observers of every age, as pain. On its presence and frequency alone have been founded most of the doubts and denials of the goodness of God, or the benevolence of the universe. It is generally accepted as almost pure evil, and by its mere presence, a standing reflection upon the intelligence and competence of the Great Architect. The sight, or even thought, of suffering is abhorrent to us, and we are sure that "Providence" ought not to "permit" it in any form. But is not

this, after all, a somewhat short-sighted and childish way of regarding the question? Pain is indeed hard to bear, and harder to look upon, but is there no harvest which its sharp sickle reaps? Of a surety there is, and a golden one, which can be gathered by no other means.

First and foremost of all, pain is the great dangersignal of nature, the spark struck from the clash of the organism against its environment. Heed its warning, avoid or remove its cause, and all will be well; neglect it, and a worse thing will befall us. It is the cry of the frightened tissues for help, and there is usually plenty of time for this to reach them if we send promptly on hearing the alarm. Without pain, in times of danger, we should be half dead before we knew we were ill. Cut the nerve which supplies a rabbit's eye and lids with common sensation, leaving everything else untouched, and what is the result? The eye soon becomes suffused, then the crystal cornea becomes clouded, next inflamed, and finally suppuration sets in, and the eye is lost. What can have caused this, for the sight was still perfect, the lids uninjured and active as ever, and the circulation unimpaired? Simply the fact that sensation being destroyed and pain prevented, the lids did not know when or how to close, nor the lachrymal glands when to secrete, and the delicate cornea was dried and cracked by the air and rasped by the dust till it blazed up into fatal inflammation. The presence of pain is distressing, but its absence is fatal.

Again, it is impossible from a philosophic point of

view to ignore the fact that pain, or the dread of it, has been, and yet is, an extraordinary, a most powerful and constant stimulus to progress. Take for instance the milder forms of it, known as discomfort, such as hunger, cold, etc., and what an important part of our actions do they even yet determine. How much work would we do if we were suddenly removed from all fear of them? Fully two-thirds of the turrets and battlements of that magnificent pile which we call modern civilization have been reared under the lash of these stern but beneficent taskmasters. Considered as a motive power alone, hunger has few equals.

If necessity be the mother of invention, then pain is the father of scientific discovery. So long as the influences of our surroundings and the workings of our own internal mechanism are productive of pleasurable or indifferent sensations, we are content to lie at ease, like a basking cat in the sun, or like the lotos-eaters "careless of gods and men," without troubling our heads for a moment about the nature, structure, or causes of these things. "Let well enough alone" is our motto. Let discomfort occur, however, and we are at once acutely interested in finding out all about them, and science is born. The healthy man doesn't know he has such a thing as a stomach, the dyspeptic doesn't know he has anything else. In the realm of morals, the "sweetness" of the "uses of adversity" has been universally admitted, while in that part of the physical field which terms itself the spiritual, the value, nay, even essential, meritoriousness of suffering has been so sadly exaggerated, that I almost fear to bring discredit upon my argument by alluding to it.

And here is where the Fifth Gospel gently but decidedly parts company with the Fourth. Although it goes even further in the direction of proving the necessity and even the beneficence of pain, it stops far short of exalting suffering into a virtue, or regarding it as the dominant and commonest element in the lot of mankind. The essential benefit of pain lies in the avoidance of its cause, and the reward is to be reaped from the thorny barrens of discomfort by determined effort and incessant struggle and not by tame and pulpy submission. It has no sympathy whatever with the morbid delusion that suffering is per se purifying and exalting, and the mere endurance of it a grace; still less that the submission to it is the one principal duty of man. It declines to regard this sun-kissed, grass-carpeted, flower-gemmed world of ours as a "vale of tears" or "wilderness of woe," and instead of holding that the more disagreeable anything is, the more likely it is to be "good for us," it would deem the fact of any object or action being repugnant to our natural tastes and instincts as at least good presumptive evidence of its injuriousness.

It furnishes a scientific and rational basis for Pestalozzi's dictum that "we do not desire certain things because we believe them to be good, but we hold them to be good because we instinctively desire them." It unhesitatingly declares enjoyment (harmony with environment) to be the normal condition of organized being, suffering the abnormal—comfort the rule, pain the exception; in short, our appetites, impulses, and instincts are the exquisite fruits of the experience of myriads of ancestral generations. If anything about us be divine, they emphatically are, and may be, freely, boldly, joyfully followed—instead of sternly repressed and distorted.

That strange distortion of the teachings of the Master known as orthodox Christianity, too often alas a mixture of one-fourth Christ, one-fourth Paul, and one-half pure superstition, regards our passions and appetites as our chiefest enemies, necessary evils, only valuable for the discipline gained in fighting them, permits their indulgence only under protest and with an air of apology, and would like to crush them out entirely were it not for the trifling drawback that life itself would be destroyed in the process. And even this consideration has been, alas, no bar to its zeal, especially in the case of other persons. From this belief more than from any other have sprung those dark and disgraceful shadows of monasticism, self-torture, and persecution, which have always dogged and too often utterly dimmed its shining course.

Nature's revenge for this contemptuous treatment of her heralds and prophets is swift and signal, and the carrying out of this belief must logically, and always has, resulted in either asceticism or hypocritical licentiousness, and generally in both.

From the standpoint of the Darwinist, our passions

are our best friends and trustiest servants, and our instincts and appetites our safest guides. The one may be humored too far, and the other followed too blindly; but in the long run they will be found to haxe done us at least ten times as much good as harm. Like Solomon's "virtuous woman," they will "do us good and not evil all the days of our life." This once recognized, the pleasure which comes from their legitimate gratification becomes something to be freely and frankly enjoyed as a mark of nature's approval, instead of a thing to be ashamed of, acknowledged with apologies, and indulged in with grave misgivings.

In short, joy becomes as integral a part of the Fifth

Gospel as grief is of the Fourth.

The grand old Greek "joy of living" comes back in broader, manlier, more enduring form, and is of itself a sufficient reason for existing. Once more the mellow glow of the golden sunlight becomes the smile of the great heart of the universe. The mistwreath upon the blue mountain, the silver flash of the rushing river amid the rich green of the reeds, the gorgeous, crimson pageantry of the hosts of heaven in the western sky, and the amethyst light in the eye of woman, are but reflections of His beauty; the warbling of birds, the song of the wind in the pine-forests, and the murmuring of pebbly brooks, are the echoes of the music of the spheres; and the joyous response which all these stir up in us is part of the grand sympathy of the universe, the love between those of one blood and one lineage. Nor does "Lebenslust" stop here: far from it. Deeper, but even sweeter and more lasting than any of these is the stern joy of battle, the warm throb which answers the touch of the frost-king, the breath of the stormwind, the dash of the salt spray over the bulwarks, the plunge of the frantic steed. Best of all, the glorious ecstasy of taking our lives between our teeth, and looking danger and death in the face, of daring everything in defence of our loved ones, the fierce music of the clash of swords, and the rattle of musketry, the sweet "smell of the battle afar off." Life is a brave, red-blooded, warm-hearted, joyous thing, which needs no sickly phantasmic "after world" to render it worth the living.

CHAPTER II.

THE OMNIPOTENCE OF GOOD.

MAN's conceptions of the World-Spirit have varied with the stage of his progress. They are almost as numerous, and quite as diverse, as the individuals who hold them; yet there is a strong family-likeness between them all. A hasty review of the order of their evolution, if its triteness may be pardoned, is logically necessary to a proper statement of the Darwinian position.

In the infancy of man, the controlling forces of the world about him were conceived of as numerous

and purely local demons or sprites.

So limited are they, that they are conceived of primarily, as actually inhabiting and inspiring certain objects or animals. The black, sullen snag that breaks the meshes of his rude fishing-net, the tree that falls crashing across his mud-hut, the tiger that pounces upon his flocks, the breeze that frightens away the buffalo which he is stalking,—these are each and all supernatural beings that may be propitiated by sacrifice and pleased by worship. They are nearly all, oddly enough as it would appear at first glance, more or less malevolent, or at least mischievous, in disposition, and the earliest worship

and ritual aims purely to secure a policy of non-interference on the part of the divinities, by flattering and coaxing, or even by frightening them. moment's reflection, however, will show us that this eurious tendency is merely the result of the much more vivid impression produced upon our senses by pain and ill-fortune, than by their opposites. The latter we take as a matter of course, a necessary reward of our merits, no amount of them disturbs our equanimity; the former excites our liveliest interest and resentment, and compels our respect and attention. "Good luck" may be left to take care of itself; no need to worry ourselves about it; "bad luck" demands our immediate personal attention and promptest and most vigorous action to prevent its recurrence. Consequently the dominant idea in the savage conception of nature is a distinctly unfriendly, if not actually spiteful, one. As Sir John Lubbock declares, "It is not too much to say that the horrible dread of unknown evil hangs like a thick cloud over savage life, and embitters every pleasure." If there be any other powers at work, they may be neglected with safety, especially as the evil ones are so much more powerful and active.

The nixies, kelpies, and Loreleis, which lurk for their prey at the bottom of rivers and pools, the witches of the Brocken, the grisly "Wild Huntsman" who sweeps through the forest on the wings of the midnight storm, the gnomes, bogies, and fetches that hide in the mountain-glens, the ghouls of the lonely churchyard, the banshee and "will-o'-the-wisp" of the mists and marshes, and the cluricans of the black bog are the ghostly scattered survivors of the earliest deities of our ancestors. And to this day such influence as they are supposed to possess is almost universally dreaded, and their very apparition the foreboder of disaster or death.

As the family, tribe, and clan gradually organized themselves in slow succession, these explanatory conceptions got classified and simplified somewhat. Instead of each individual, family, or valley having its own particular "familiar spirit," as was still actually the case scarcely three generations ago with the "Bodach glass" of the McIvors and the "banshee" of the O'Donahues, some two or three are agreed upon as the gods of the tribe or country. And this increase of dominion and dignity on their part is accompanied by some improvement in disposition. Though, like their earthly prototype, the embryo Napoleon of the tribe, they may oppress and plunder their own people, they will at least protect them against their enemies, and even administer a rude justice among them. This is the stage in which the Ark of the Covenant is carried into battle and the Philistines explain their defeat on the ground that the battle was fought among the hills, the "native heath" of Israel's gods, while "our gods are the gods of the plain." From this it is but a step to the conception of gods who, except when their vengeance is roused or cupidity excited, are comparatively indifferent to mankind, and whose attention should be consequently avoided as completely as possible. Prosperity, especially, provokes

their jealousy, and it is still popularly regarded as "dangerous" to be too happy.

A little further we have the powerful group of deities, such as inhabited Olympus, who could be friendly or hostile, according as their interest or whim suggested, and whose general attitude was that of a feebly good-natured tolerance of mankind. The first dawning of the idea of a general unity is here seen in the presence of a presiding deity in the person of Jove, who, though of distinctly doubtful moral character, on the whole checks the worst excesses of his subordinates and maintains a sort of rude justice among and between both mortals and immortals. But even Jove may be bullied by Juno, tempted by mortal women, and threatened by conspiracies of the lesser gods, while ever behind him, vague but terrible, is the huge black figure of resistless Fate, of Molpa, of Ate, which whirls him helplessly along.

So far malevolence and benevolence, good and evil, have been inextricably mixed together in every conception, the evil on the whole predominating; but now comes the noble step for which we are mainly indebted to the great Semitic family, of separating the evil and spiteful from the righteous and just, under the figure of the "Powers of Light" and the "Powers of Darkness." At first these powers are almost equally divided, waging an incessant conflict with varying chances, man's assistance being often sufficient to turn the scale. Traces of this last curious idea are to be found in both the Old and New Testa-

ment, in such expressions as "Coming up to the help of the Lord against the mighty. . . . The kingdom of heaven suffereth violence, and the violent take it by force," and in the presence of the saints at the battle of Armageddon.

One of the simplest forms of this theology is the religion of the early Persians, where the Powers of Light are marshaled under or personified by the great "Spirit of Good," Ormuzd (Ahura Mazda), while those of Darkness are similarly represented by the great "Spirit of Evil," Ahriman.

Both of these beings are regarded originally as divine, immortal, and entirely independent of each other, and are even represented as making agreements and treaties with each other, as in the first chapter of Job, or assisting one another, as when the "lying Spirit" is permitted to enter into the prophets of Ahab to lure him on to his death at Ramoth-Gilead. But first they are regarded as practically equal in power and authority, evil if anything, being the more active, and certainly much more to be dreaded of the two, but as the intellectual and ethical standing of the race improves, the latter gradually diminishes in power and importance until at last it owes its very existence to the sufferance of the good, and degenerates into a mere officer of vengeance, or "roaring lion," ready to pounce upon all offenders the moment that the favor of the good power is withdrawn from them.

In the earlier stages, man prayed and sacrificed to or made his peace with the Power of Evil directly, a sin whose enormity and alarming frequency was inveighed against by every ecclesiastical tribunal up to the eighteenth century, and whose possibility is still to this day admitted wherever the belief in witchcraft, or "selling oneself to the Devil," exists. In later stages he prays and sacrifices to the Powers of Good, that they may protect him against the Powers of Evil. There is, alas, too much of this motive, even in the worship of the nineteenth century, while to the medieval Christian, the principal use of God would seem to have been to protect him from the Devil. Indeed, so much is the latter personage feared and dreaded in all ages, in spite of his fallen and degenerate condition, and so incessant and tremendous is the struggle to escape his clutches, that one can hardly help wondering whether he has not practically become the real object of worship to the shivering and self-tortured monk, the Jesuit with his torch and rack, the beauty-hating, witch-burning Puritan, or the modern camp-meeting exhorter with his hell-fire and brimstone. Judged by their frenzied excesses and their fruits, Satan, rather than Jehovah, is their god.

Both Christianity and Mohammedanism, while theoretically declaring that God is omnipotent, all-wise, all-loving, with the noblest of attributes and loftiest character, a being who compels our worship and admiration, yet find themselves practically very much concerned with a certain greatly inferior and defeated, but extremely active and malignant, Evil Spirit, who, for some mysterious reason, though utterly base by nature and of wholly injurious influence, is permitted to exist, although a vague hope is held out of his ultimate extinction or disappearance.

This hope, Darwinism fulfils. The Fourth Gospel declares that the universe consists of an Eternal God plus an Immortal Devil. The Gospel according to Darwin rings out the trumpet-call, "There is no God but The Good." It bases this, its faith, upon no documents save the broad pages of the Book of Nature, with their hieroglyphics of green and gold: no miracles, save the old but ever-new ones, of the sunrise, the springing of the grass, the egg in the downy nest: no voice save that eternal choral in which the thunderous diapason of the surf upon the crags blends with the singing of the morning stars. And "there is no speech nor language where that voice is not heard."

In the realm of the great physical forces, its supporting evidence amounts almost to a demonstration. Here are giants indeed, fierce, resistless, terrible. Which is the greatest, the most powerful? First of all, the eye picks out instinctively the dazzling helm of the messenger of Jove, the lightning with his glittering spear, and his black-browed brother, "Ba-im-Wa-Wa," the thunder, at the sound of whose awful voice "deep calleth unto deep." But there is A Mightier far than these. The glance is next caught by the towering, threatening, form of the Storm King in his mantle of black cloud, edged with snowy fringes of sea-foam; he bows the giant oak like a bulrush, and crushes the iron-clad leviathans of war like egg-

shells, but there is one who feels him but as the draught of his fireplace. Scarce can we turn our heads ere we are met by the deadly tiger-like rush and swirl, and sulky foam-crest of the flood-fiend with his familiars, the hissing, seething waterspout, and silent shroud of the snow in its soft but resistless and fatal folds.

Surely here is the "Prince of the Powers" chiseling out the canyons, leveling the hills, filling up the valleys, and building the continents out into the deeps of ocean, but in the eyes of the King he is a mere gutter-flow. What then is the greatest among the physical forces, the Chief of the great blind Titans? Like the "still, small voice," it is neither in the sweep of the whirlwind, the throb of the earthquake, nor the glare of the lightning, but is gentler and greater far than any of these. More penetrating than the thunderbolt, stronger than the storm-wind, more irresistible than the floods of many waters, is the gentle, laughing, golden Sunshine, to which the flowers lift their faces, and little children stretch out their tiny hands. Here is the Greatest Thing in the physical world, and behold it is Good.

Let it withdraw itself, and the light of the world is gone, let it appear, heat quickly follows, and with it life in all its forms. Without the vortex-rings born of its warmth, the winds could not stir, and the very air would rot in a stagnant pool thirty miles deep; without its ever-plunging force-pumps, no clouds could form to refresh the earth and grind down the mountains into meadows, not even the blue

glitter of electricity would relieve the deadly gloom; in fact, all these tremendous forces are but puppets moved by the Sun God's fingers. And yet they have been worshipped far oftener than he has, and seriously regarded as not only independent, but even greater than he.

Man is inclined to worship chiefly those things and influences which can make him uncomfortable,—for obvious reasons,—hence his idea of their relative importance. It may be only a curious coincidence, but the cynical suggestion makes itself, that the light-and life-giving Sun-God has been most devoutly worshipped in or upon the borders of the tropics, where droughts and sun-strokes were to be dreaded.

In the realm of animate existence, what is the greatest thing?

Watching the tiny shoots and delicate tendrils of spring life, trembling in the blast or bowing before the rainstorm, they seem the feeblest, frailest things in the world. In comparison with the birds and the animals, the robin scudding South before the breath of the Frost King, or the wolf crouching in his lair till the storm has abated, they seem like pygmies in the grasp of Titans. By thousands they fall at our side and tens of thousands at our right hand, shriveled in the glow of the forest-fire, flattened by the wind, buried by the floods, blighted by the frosts, withered by drought, every element seems their foe. Their destruction is by wholesale, their reproduction by retail. Surely, they cannot long escape extinction! They seem to have done so, however, for some bil-

lions of years, and not only that, but have grown and increased in that time from a mere handful of tiny gray lichens, clinging to the inhospitable surface of the granite, into these myriads upon myriads of forms, ranging from the most delicate beauty to the most majestic grandeur, in the very teeth of just such hostile conditions.

They rise alike upon the ruins of the grandeur of empires, and upon the rotting fragments of the very rock ribs of Mother Earth. Yielding to everything, they conquer all things at last, even Time himself. They achieve eternal life. This generation withers and dies, but not before its life has fallen back into the soil to become the seed of the next. Mountains change their form, their granite crags crumble under the frost and melt beneath the torrent; the "white and wailing fringe of sea" is continually changing its sandy curves and steadily receding oceanward, but the carpet of living green which robes the one and borders the other smiles on forever, unchanged except by increase. It is not only as everlasting as they, but gains on them century after century. And strange as it may seem, the softer it is, the more intensely alive, and the more irresistible! The ivv will destroy the oak; the pine root cleaves the solid rock; the worm pierces everywhere.

In our own bodies, the hard and ivory-like bone, and the flinty tooth, soften and melt before the advance of the soft, jelly-like "granulation tissue" of healing processes, or the attack of the polyp-like osteoclast, while the rigid skull is molded upon and

by the soft and delicate brain within. Here again "organized sunlight," which we call "life," is the greatest, the strongest, the most enduring thing in the world. And behold it too is Good.

In the world of moral forces, which is the greatest? Is it the great, positive, noble, sunshiny forces of Love, Truth, Honor, Courage, or the fierce, narrow, bitter, crouching impulses of Hatred, Falsehood, Dishonesty, Cowardice?

The question answers itself. With the exception of Hatred, all of the latter group are essentially negative, merely the absence of the virtue which is their opposite. Alone they would fall by their own weight, and can only exist or have influence at all as exceptions to a general rule. A man must tell the truth at least ten times to be able to lie once to any advantage, and it is only those swindlers who have earned a high reputation for probity by years of honest living who can do any serious harm. No one would think of trusting an habitual liar or cheat. Even from a mere commercial standpoint, "honesty is the best policy." As to the relative strength of Love and Hatred, the general opinion would hesitate somewhat before deciding. But it would not be for long. In the average human mind, there is a dread of hatred, a fear of arousing enmity, which is positively superstitious in its intensity and out of all proportion to the real power of the passion. Very much for the same reason that our savage ancestors first worship the hostile influences of nature, because they make such vivid impressions. Probably the lyric Wizard of the North voices pretty nearly the popular sentiment upon this theme when he makes the fierce-eyed bard chant,

"Kindness fadeth away, But vengeance endureth forever."

Then again an enormously exaggerated importance is ascribed to hatred from another cause. It is so much more soothing to our self-respect to ascribe our misfortunes and failures to the malice and machinations of real or imaginary enemies, than it is to admit them to be due to any deficiencies in ourselves. The justly defeated candidate blames the spite of his opponents or treachery of jealous friends, not his own unfitness; and the moral transgressor ascribes his own sin to the malicious wiles of the Devil.

Indeed, in this respect the Evil Spirit is a positive comfort. Fully a third of his "bad eminence" in the theology of the day is owing to it, and Darwinism like Buddhism has no substitute to offer for him, though heredity may possibly be twisted to fill the gap by a little ecclesiastical treatment.

But these views of the power of hatred are mere optical illusions which vanish on careful inspection. Hatred is the leaping flame of the brushwood campfire, capable of much damage at times, but fitful, short-lived, temporary. Love is the clear, steady glow under the boilers of the great engine, purposeful, constant, undying. Even that much-denounced passion, selfishness, the motive power of civilization and the ruling impulse of the great bulk of human action,

is essentially, trite as it may sound, a form of it, viz., love of self and not hatred of others, as one would imagine from the vehemence with which it is preached against. It is a tremendous factor in progress, and within reasonable limits is not only legitimate, but highly commendable. Even the Golden Rule does not forbid it, but merely demands that "love of thy neighbor" shall equal it, because it is the highest and most reliable standard to be found. It is the love of freedom and of justice that makes nations great, the love of country or devotion to gallant leaders which wins great battles, the love of truth that inspires a Galileo, a Newton, a Columbus; in short, love is the mainspring of every great achievement.

What trophies can Hatred show?

Even in battle the best soldier is not he who most bitterly hates the enemy, but he who most dearly loves his country. Hatred is not even the ruling spirit of warfare. Far from it. A dozen other impulses are more potent here, love of country and home, of glory, ambition, emulation, obedience, sympathy, comradeship, desire to succeed.

Love is far the Greatest Thing in the moral world,

and that pretty nearly includes the universe.

Sweetness and Light are again triumphant, entirely on their own merits.

In fine, wherever the glance falls, whatever realm we scan, we find the Good, omnipotent and constant, positive—the Evil, feeble and cringing, negative. Evil is the black shadow cast by the sunlight of the Good; the exception to the rule of goodness, nay

more, in most cases only a lower form of it. As Browning chants:

"The Evil is null, is naught,
Is Silence implying sound;
What was good, shall be good
With, for evil, so much good more."

If this be the case, what need is there, then, of the conception of an Evil Spirit? Or what scope remains for the exercise of his powers?

It is curious to notice how the extent of his dominion has steadily shrunken with the progress of knowledge. In the earliest days, he was master of the greater part of the universe, for his sway was absolute during the hours of darkness: indeed, he is known as the "Prince of this World" to this day. He was a personification of that fear of the dark which even yet casts a gloom over the infant or ignorant mind. But darkness was soon found to be just as necessary to life, and almost as beneficial as light; and the night-demon is changed into an angel whose wings softly hover over the bosom of tired old Mother Earth. In a like manner, also, the storm, the lightning bolt, the ocean surge, the bitter tooth of the frost have had their devils cast out and sit, clothed in their right mind, at the feet of man, his best friends and most powerful servants. Driven from these domains, the evil spirits crave permission, as it were, "to enter into swine," and appear next in the human body. The pangs of hunger are attributed to them, and to this day the nineteeth century

pagan of the Whitechapel slums will gravely assure you that she has a "tiger in her inside," to whose claws she lays the pangs of hunger and the gnawing pains of indigestion. Then disease becomes his special manifestation, and the "medicine-man" is summoned with drum and sweat-bath and evil smells to drive him out of the sufferer's body. Traces of this belief are yet to be found in popular medicine. Finally in this stage, death becomes his peculiar triumph, and charms are worn, vows are paid, and pilgrimages undertaken in the hope of avoiding it as long as possible.

But now, in the clear, white light of even such knowledge as we have obtained, hunger is seen to be one of the greatest and most constant spurs to progress; disease, but health-processes run riot, life out of place; and death, but the kindly welcome return of our tired bodies to the warm crucible of Mother Earth, thence to emerge again in higher, lovelier forms. As the darkness clears away, the gruesome shapes that it has conjured up disappear with it.

Last of all, the Devil entereth into the hitherto undiscovered forces of nature, the realm of theology, and the regions of the future. He has been completely dislodged from the first stronghold, but only partially so from the second and third, which offer peculiar facilities for his occupancy, "being a thing ethereal, like himself." Everything that good Father Boniface couldn't understand was "of the Devil." Roger Bacon was in league with him when he produced those tremendous explosions in his cell, as was

evidenced by the sulphurous smell which followed them, and many a noble discoverer was denounced as a wizard, or even burned at the stake, for availing himself of his aid. Had Edison lived but two centuries ago, he would surely have been stoned like the rest of the prophets. In fact, the whole realm of the mysterious was the peculiar domain of Satan, as our colloquialism, "the Devil is in it," still reminds us, and to a considerable degree it is so yet, but as fast as the mystery retreats, so does he.

In the theological world the Evil One still holds an important place, as the author and instigator of what is technically known as "Sin," but as some human individual is held to be fully responsible and is severely punished for every particular and specific item of this transgression, it is a little hard to see just exactly what part the agency of His Satanic Majesty plays in it. If sin is the work, not of man, but of an Evil Spirit, why punish the former for it? If, on the other hand (to which science cordially assents), every instance of wrong-doing is the voluntary act of some free human being, and further, in most cases, the effect of a primarily-beneficent impulse run wild, a superhuman "Father of Sin" becomes little more than a figure of speech. In fact, his principal remaining function, even here, is that of the phantom warder of a ghostly future-or underworld, in which congenial limbo we may leave him for the present.

To conclude, a being or influence absolutely and essentially evil is a thing of which the Darwinist can

find no proof or trace whatever. It would be ineapable of continued existence, even if brought into being, is contrary to the whole tendency of the universe, and is absolutely unthinkable. This gives him the whole universe to love and to worship.

The Darwinist's God is neither a "jealous" God, nor a petty or revengeful one, for he worships the Weltgeist, that great calm, loving impulse which underlies all the forces and pulses of nature. Everything in nature to him is sacred, and any "place whereon he standeth is holy ground."

The forests are his temples, the mountains his altars, the birds his choristers, and the flowers his censers.

The Darwinist alone can truly cry:

"O world, as God has made it,
All is beauty!
And knowing this is Love—
And Love is Duty."

CHAPTER III.

THE HOLINESS OF INSTINCT.

THE soul of man has commonly been regarded as the battle-ground of two opposing influences. These have been often conceived as extrinsic, namely, angels and demons, Evil and Good; but more frequently as intrinsic and inherent, as elevating impulses upon the one hand, against degrading on the other; soul against body, immortal against mortal.

The latter views fall mainly into two great classes, one in which both conflicting forces are regarded as equally immanent and indigenous; the other, in which the higher or spiritual contestant is regarded as acquired or imported at comparatively late stages of development,—"breathed in," as its name implies, by some superhuman power. According to the former view, the nobler impulses of man's nature are proofs of his fall from a higher estate—remains of an Edenic condition of purity; traces of a lost innocence and holiness. This is the view of the Old Testament theology, and has probably found its highest and most beautiful expression in Wordsworth's familiar ode "On Recollections of Immortality."

"Trailing clouds of glory, we do come From God, who is our home."

The other, which is that of the New Testament, and of the Fathers and dogmatic theologians generally, is that of the two warring elements one is primitive, carnal, animal, sinful, while the other is secondary, spiritual, ethereal, holy. For example, Paul declares: "I know that in me, that is in my flesh, dwelleth no good thing;" urges us to "mortify the flesh with the affections and lusts," and cries out in despair: "Who shall deliver me from this dead body" (literally, "body of death"). And not only Christian theologians, but Buddhist monks, philosophers of all creeds and of no creeds, poets, mystics, dreamers of every sort and age, have reveled in it and re-echoed it until it has become a part of the household furniture of the thought of the world.

The twofold constitution of man's nature, from a mere figure of speech has come to be regarded as a literal, material fact.

The higher part, generally known as the soul, is popularly assumed to have become joined with the lower part or body, much as a flower-seed might have taken root in a patch of soil. It is admitted that they are absolutely dependent upon one another, the soul for its existence, the body for its graces, and not a scrap of ponderable evidence can be adduced of the possibility of the existence of either apart from the other, and yet, in flat contradiction of every other similar instance in nature, the bitterest enmity is supposed to exist between them. The impulses of the body are, above all things, to be distrusted, re-

pressed, and dreaded by the soul. "Whatever is flesh is sin," while the aspirations of the soul are equally certain to be opposed, thwarted, and, if possible, brought to naught by the body. "The mind of the flesh is enmity against God." The most favorable view that we are permitted to take of the body is that it is a slow, stupid, extremely exasperating, but useful servant; a necessary evil which must be tolerated and even humored to some extent, because it would be difficult to get along entirely without it. This was the feeling of the monk Francis d'Assisi, who, though so full of love for all others of God's creatures that he actually conceived and carried out the beautiful idea of formally preaching the Gospel to the birds and the fishes on the lake-shore, could only find it in his heart to say of his own body, when told that it had been so weakened by fastings and vigils as to be hopelessly diseased, "I have sinned against my brother, the ass."

But even this amount of contemptuous toleration is rare. More commonly the body is described and regarded as "a dull clod," a "house of clay," a "sepulchre," a prison against the bars of which the imprisoned soul beats its wounded pinions until Death comes to its release. All of which is about as reasonable as if a buttercup should revile the soil which hung about its roots and forcibly prevented it from floating off across the meadow-lands with every zephyr that blew. The soil has not only produced the buttercup, but will produce, after it has passed away, thousands of nobler, grander forms than any-

thing its shallow, little, golden pate could even conceive of.

"And fear not lest Existence closing your Account and mine shall know the like no more. The eternal Saki from the Bowl has poured Millions of bubbles like us, and will pour."

Even so the body-stuff of these eestatic dreamers has not only produced them, dreams and all (though how much to its own credit is to be doubted,) but has within itself grander and lovelier possibilities than even the loftiest imaginings can depict, to say nothing of the morbid, childish phantasmagoria which form the bulk of such "visions."

"Eye hath not seen, nor ear heard, neither hath it entered into heart of man to conceive the things which God hath prepared for them that love him."

But the truly "spiritually-minded" of all creeds have not stopped even here. It is not enough for them to regard the body as a mere clog upon the flight of the soul, a passive hindrance to spiritual progress, but they openly declare war upon it as their soul's bitterest enemy, and as something actually sinful in itself, a creature so degraded and so essentially vicious, that to deprive it of its comforts, thwart its impulses, nay, even torture it and refuse to supply its simplest wants, becomes positively meritorious. The renunciation (in plain English, cowardly desertion) of wife and children, parents,—in short, of all family and social ties, the abstaining from food, from drink, from shelter and warmth, scourging the back

with chains until the blood comes, cutting the feet into ribbons by barefoot pilgrimages over stony roads, lying stark naked upon icy pavements all night long, and even such well-nigh ludicrous "mortifications" as wearing hair shirts, walking with pease in one's shoes, refusing to wash, comb the hair, change the clothing, have been accepted as deeds of saintly odor. In fact, the principle appears to have been that the more a man can humiliate and torture his body, the more he will glorify and please the God who made it.

To such an extreme has it been carried, that not only are the selfish appetites and impulses of the body to be repressed, but even its kindly, altruistic ones. Paul commands us to "mortify the flesh, with the affections" as well as the lusts thereof; and even in our own century grave and learned theologians, after much deliberation, have decided that "natural goodness" and the "graces of nature" are sins in the sight of God, and even deeds of righteousness by the unregenerate will be counted against them as sins in the great day of judgment. To say that such utter antagonism between plant and soil, egg and nest, fish and water, child and mother, is not only absolutely unparalleled but flatly contradictory to everything else in nature, would be simply waste of breath, for we should be promptly informed that we were "no longer under nature, but under grace." Fortunately the retort "Deliver us from such grace, though instinctive, is unnecessary, for the remorseless logic of events has already accomplished this. Wherever this belief has gone, it has written its progress in letters of blood. Its true nature stands revealed, in the filthy, degrading hermit-craze, in the black plague of monastscism, with its fever fits, the inquisition, Jesuitism, St. Bartholomew's Eve, and "religious" murders and persecutions of every description, and has left a broad, black, shameful brand across the pages of European history, which has come perilously near stamping a bar-sinister across the escutcheon of Christianity.

By experience utterly discredited, practically dead, it survives only in the formal theology of the modern church, though, fortunately, like many of its associates there, it has become pure theory which every one believes, but no one dreams of living up to.

The dual conception of man's nature, with its conflict between two great opposing forces, is strikingly similar to that which is held in regard to the world about us. And like it, will, I think, be found upon closer study, to be based upon a misunderstanding, a judging from appearances, without investigating the real nature of the phenomena.

When we come to weigh the question systematically "which is the greater," good or evil, passion or virtue, love or selfishness, we are promptly driven to the unexpected and even unwelcome conclusion that there is no ground for debating the question, as absolutely all of these "opposites" are found to be merely varying intensities under different circumstances of one and the same set of impulses. Passion is but blameless, healthful appetite run riot. Hatred

is but righteous resentment become morbid. Envy is a jaundiced desire to excel.

When it comes to specific deeds and actual instances, the essential identity becomes even more obvious. The fault of gluttony, for instance, does not lie in the impulse to eat, for that is one of the great primal appetites, without which the race would soon cease to exist. Nor in the kind of food consumed, for that may be both wholesome and nutritious; nor in the absolute amount, for that might be easily digested by a more vigorous or needy individual, but simply in the relative excess, the failure to control an originally beneficent impulse.

The crime of theft consists, not in the impulse to appropriate, for that is thrifty as applied to material objects, and saintly as directed toward spiritual graces; not in the nature of the thing appropriated, nor in its position, size, or color; nor even in the uses to which it is to be put, or its usefulness or uselessness to the acquirer. A man may take anything, of any value, by any means, without becoming a thief, providing that he does not know or reasonably conjecture that it belongs to some one else. He has a right to anything that he can find, providing no one else has a prior claim. His liberty in this respect leaves off only where some one else's begins. The crime lies solely in an actual or possible injury to somebody else, a failure to balance self-love by love of one's neighbor. Adultery and fornication are indulgences of the great sexual or race-continuing instinct under unlawful conditions, in other words, under conditions which experience has shown to be injurious instead of beneficial to the race. Even the crime of crimes, murder, which with its horrid front and gory locks almost appears to have a demon-like existence of its own, an essential, self-evident atrocity, consists not in taking the life of a fellow-being, for this is justifiable,—nay, even at times commendable, in war, in defense of country or loved ones, as an officer of the law, to protect the rights and property of others, even in the defense of one's own life,—nor in the time, manner, or circumstances of the deed, but solely in the destruction of another's life and happiness for inadequate, selfish, or malicious reasons.

In short, the "principle" of every sin that can be mentioned, except lying, is a natural, beneficent instinct. Crime is simply lack of control. Right and wrong are broadly considered purely relative

terms.

Absolutely no impulse is primarily and essentially evil or sinful, though any may become so, if uncontrolled. No action is of itself wrong,—the circumstances under which it takes place alone determine its moral quality. This statement will appear like a truism to all who have calmly considered the question, but its converse may not be quite so readily accepted, though equally true and important, viz., that there is no impulse so high or holy that it may not, if followed to an extreme, become both degrading and sinful, and no action so beneficent or so saintly that it may not under certain circumstances be both harmful and immoral.

Take for instance, the noble instinct of parental affection, the purest and most unselfish flame which burns in these earthen lamps of ours, a grace which blesses alike the possessor and the receiver—the very corner-stone of morality; and yet the relentless ferocity of the tigress who has cubs, the tragedies of Lear and Pére Goriot, and the hundreds of humbler instances, familiar to us all, of spoiled sons and petted daughters who have been utterly ruined and brought shame and bitterness upon their families, solely from the unreasoning devotion and blind indulgence of a fond mother or doting father, would at once suggest themselves as illustrations of how even the most sacred affection, in excess, may become immoral.

The injustice which affection may work to those outside of its scope, and the corruption even, which it will introduce into public life, have been epitomized in one word, "Nepotism."

Again, take the religious impulse,—the instinct of worship, the adoration of the mystery of the universe. it is a feeling inspiring in itself and ennobling in its tendencies. It has covered the world with its prayers in stone, the noblest architectural achievements of the race, its temples, its shrines, its mosques, its cathedrals. It has been the nurse of poetry, painting, and literature, and the very mother of music. But when the student of history turns to the reverse of its medal of honor, and reads its deeply-cut record of persecutions and penances, of wars and of massacres, of crusades and inquisitions, of burnings and torturings, of fanaticism, intolerance, and oppression, he is

driven to admit that even this lofty impulse uncontrolled, rapidly becomes a hurtful and degrading one.

Indeed, the line is so easily crossed that he is in sad doubt at times which side of the medal should be hung outward.

Even our sense of duty, our enthusiasm for the right, which is supposed to be our most nearly divine attribute and to lift us furthest above the brute, is capable of sad perversion. It has inspired some of the noblest characters and grandest actions of history, and would appear to be the one safe and absolutely trustworthy guide for humanity. "Only follow this," we are assured by philosophers, prophets, and priests of all creeds, "and all will be well." It is propably the safest single guide, but there is not a folly or a crime into which blind and unreasoning obedience to it has not led.

It is a sense of duty which leads the Brahman widow to cast herself upon the funeral pyre of her husband. It was a sense of duty which drove the best of the later Roman emperors to persecute the early Church, that inspired the obliquities and atrocities of Ignatius Loyola, that impelled Calvin to burn Servetus, and urged the Puritan to banish and hang the Quaker, and burn and torture helpless old women. Indeed, the "higher" and more "spiritual" an impulse, the more capable of perversion it would seem, if not constantly checked by our "lower" but kindlier and healthier instinct and affections. If it were not for the vigorous and incessant opposition of

our bodily tendencies, our spiritual ones would soon exterminate the race.

Which are really the "higher"? Morality, like sanity, is everywhere and always a question of balance, of control, of moderation.

Love of self impels us forward until we are checked or deflected by the other great natual instinct, second only to in power, love of others, beginning with love of offspring and extending and broadening to love of the family-circle, the clan, the nation, the race. For every passion nature has provided an affection as a countercheck; for every spring of action, a balancewheel. Nay, more, if one passion becomes overbearing, all the others unite to oppose it. The path of Goodness, Sweetness, and Light is most surely reached and best followed, not by the deification of any one of our impulses and tendencies, by an intelligent and reverent balancing of the promptings of all. That the resulting motion will always be in the right direction, is the Faith of the Gospel according to Darwin.

This brings us to the question of the source and origin of what we are pleased to term our moral sense, those instincts which influence our conduct with regard to the rights and feelings of others rather than to our own, our altruistic impulses, the "sense in us for conduct," as Matthew Arnold terms it; and here is where the ray of the Fifth Gospel becomes far brighter and more cheering than that of the Fourth.

The position of St. John is a perfectly simple one.

Conscience is the direct voice of God, "the Light that lighteth every man,"-a principle far above and utterly different from anything which could possibly have developed out of poor, sinful, selfish human nature. It is to over-ride, not only the passions, but also the affections and sympathies of humanity; nay, more, that all these are utterly contrary to and in opposition to it. "Whose hateth not father or mother, for my sake, is not worthy of me." "Whosoever forsaketh father, or mother, or wife, or children, for my sake and the Gospel's shall receive . . . Eternal Life." Every natural instinct is thus practically placed upon the side of Wrong, and Right can only be saved from defeat by the continual interposition of the Deity. Human nature, which this Deity is supposed to have created in his own image, is not to be trusted for a moment. With such a view, is it any wonder that it has proved a "religion of suffering," of sadness, and of despondency. "Narrow is the gate and strait is the way that leadeth unto Life, and few there be that find it." "For if the righteous scarcely be saved, where shall the sinner and ungodly appear?"

On the other hand, we have the "utilitarian" theory of Spencer, the "greatest happiness" theory of Mill, the "refined selfishness" one of Bentham, all of which derive this exquisite faculty from the purely selfish impulses of man's nature. It is an enlightened self-interest, modified by experience, in fact. And I regret to say that modern evangelical Christianity has practically swung round to the same ground, in-

asmuch as the main incentive to right doing which it urges, is the hope of escaping hell or gaining heaven.

Compare all of these with the view "from a natural standpoint," developed by Darwin in his immortal chapter on the moral sense in "The Descent of Man." Here is absolutely the only conception which does not compel us to regard it as either beginning or ending in pure selfishness. How much more noble, satisfying, and adequate it is can only be appreciated on careful study and comparison with the others. The source of morality is seen to be in the social instincts and sympathies which are derived, not from tempered greediness or chastened self-interest, which has been whipped within the bounds of decency by repeated bitter experiences, but directly from the warm, beautiful, and unselfish family affections. Here is a source and a sanction as truly divine as anything imagined by John. And, best of all, it is nothing foreign or hostile to the rest of our nature; but, on the contrary, a part of it. Every other faculty of our being subordinates itself to it, and shares and glories in its triumph. So far from the lower instincts being hopelessly at war with and anxious to destroy the higher, they are their originators and faithful friends, so faithful, that in many cases they save the latter from its own excesses. There is no "crucifying" to be done, for we could not possibly afford to dispense with either. The impulses of the "flesh" within their proper limits, are seen to be just as holy as those of the "Spirit."

The love of the mother for her babe, of the boy for

his careworn mother, of the husband for his sweeter self, are as divine as the devotion of the saint and the self-denial of the anchorite, and infinitely more beautiful and wholesome. No tendency can be condemned simply by calling it human; not even by stigmatizing it as animal, for these beautiful, natural graces are by no means confined to the human family.

We sometimes forget that the affections and embryo moral instincts are just as truly "animal" as are the passions and lusts. Humanity can boast of no nobler, truer emotions than the love of the doe for her fawn, or the dove for her nestlings, the reckless bravery of the bear in defense of her cubs, or the partridge in protecting her young, the fidelity of the lory to his mate, or the dog to his master.

Call the muster roll of our virtues, and see how many of them have their origin outside the human family. What superiority dare we claim over the "brutes," the birds, the bees, the ants, in courage, in perseverance, in affection, in industry, in devotion,

in patient endurance.

The pedigree of two-thirds of our virtues is far longer than the human race. They are backed by the inheritance, not merely of our whole human lineage, but by that of our infinitely longer pre-human ancestry. Their strength is drawn from the life of all the ages.

Call the roll of our vices, and see how the case stands with them. Here is the list of Paul, who was a connoisseur in such matters, judging from the number he has tabulated: "Fornication, uncleanness, lasciviousness, idolatry, sorcery, enmities, strife, jealousies, wraths, factions, divisions, heresies, envyings, drunkenness, revelings."

If for the first of these we read, as was probably intended, "prostitution," and omit such as are obviously repetitions, namely, "strife," "wraths," "divisions," "envyings," and "revelings," out of the ten that remain only three can fairly be claimed to be of animal origin,—lasciviousness, enmities, jealousies. The others are purely human accomplishments.

No animal has yet been found guilty of prostitution for hire, of drunkenness, nor, for obvious reasons, of idolatry, sorcery, heresy (or the burning of the holders thereof), of factious hate, of gambling, of lying, of commercial swindling, and only a few of them have "risen" to the dignity of wife-beating, of cruelty to children, or of slavery.

Take it altogether, our animal ancestors have quite as good reason to be ashamed of us as we of them. Indeed, it would almost seem as if one of the most common uses that man had made of the elevation he had attained had been to fall from it. Certainly the "higher" an impulse is, the more distressing the perversion of which it is capable. "Lilies that fester smell far worse than weeds."

The cheering thing about it is that the pedigree of two-thirds of our vices is of mushroom length; that of our virtues reaches back through all the ages. Our virtues are older than we are.

What then is the true value of instinct as a guide? Of the very highest; popular impression and ecclesiastical teaching to the contrary, notwithstanding. Instinct is the crystallized experience of thousands of generations. It is the golden seed-wheat chosen of a million harvests and a myriad threshing-floors. It ranks lower than reason because less of individual volition or judgment enters into it; but as a guide it is far safer, as a spring of action far more reliable and effective, and so far as it goes, has no superior. Our life-long struggle to form "good habits," as we say, is merely an effort to change rational preferences into instincts.

The beauty, the accuracy, and the beneficence of the instincts of the lower form of life have been the marvel and the admiration of every observer and philosopher,—even of theologians. Out of a thousand instances we need merely suggest the architectural instincts of beets and ants, the migratory of birds and fishes, and the chrysalis-making one of grubs. But it is calmly assumed that in our own species alone they have utterly lost their force and value. Our pride would not permit us to depend upon or even recognize them, lest we should seem to admit our kinship to "mere brutes." Fortunately for us, they still remain with us in spite of our haughty refusal to officially recognize them, and control two-thirds of our actions; and it would be to our credit and benefit every way if they controlled the majority of the remainder. Every time we neglect them we suffer. It is, of course, hardly necessary to remind you that the great mass of our most important vital movements, such as breathing, swallowing, suckling, eating, drinking, walking, etc., would be impossible without them, but beyond all this, whenever we can find an instinct to follow, it is safe to do so nine times out of ten, even under civilized conditions.

Ask any intelligent physician, and he will tell you that if civilized man would only follow his instincts in respect to fresh air, sunlight, exercise, food, water, bathing, etc., he would be far healthier, happier, yes, and more moral than he is. Our dyspeptic race would be better in every way, for a greater indulgence in "the pleasures of the table" (including at least twenty-two minutes for dinner), for more catlike basking in the sun, for a good deal more "barbaric indolence," for more rebellion against the fiendish old Puritanic saw that "Satan finds some mischief still for idle hands to do," for a more frequent giving way to the impulse to fling the yard-stick out of the window, and the ledger under the desk, and away to the woods, the fields, and the mountains; if the grown man would run away and "go swimmin" as the boy does.

An excellent illustration is the case of intoxicants and narcotics. Did any one ever hear of a baby with an instinct for whisky, or a child who enjoyed the taste of tobacco or the smell of a cigar? Tongue, nose, and stomach unite in their disapproval of all three, as the comic horrors of a boy's first smoke, and the racking headache of the freshman's spree abundantly testify. It is only by systematic and repeated repression of instinct by "reason" and "higher intelligence" that either of these habits is

formed; yet we have the colossal impudence to say that a man who is reeling drunk has "made a beast of himself!"

And this is by no means an exceptional instance; indeed, it would not be too much to say that two-thirds of the diseases of civilization are due to the neglect or deliberate repression of some instinct.

However valuable the instincts may be admitted to be in health, the almost universal impression is in both popular and professional circles that they are just the reverse in disease. The sick man is popularly supposed to want just those things he ought not to have, and to dislike just those things which are "good for him." And, indeed, altogether too much of both household and professional medical treatment was originally constructed on that very principle. Its principal reliance was placed upon "bitters" of all kinds, the nastier the better, purges, emetics, assafetida, blisterings, bleeding, starving,in fact, the more disagreeable a drug or process, the more violent its effects, the greater its curative power was supposed to be. Even at this day a "medicine" must be bitter or it isn't much thought of by the patient, and a "hygienic dietary" is usually constructed simply by forbidding everything that the invalid has any liking for.

The simple truth of the matter is, unflattering as it may be to our professional pride, that even up to the middle of the present century the old demontheory of disease had far too much influence over our therapeutics. Disease was still regarded as an

entity which must be driven out of the body of the patient by more or less violent or repulsive means. This distrust of the instincts in disease is not medical, but priestly. The wonderful "progress of modern medicine" has consisted very largely in getting rid of this idea. Wounds, for instance, instead of being poured full of wine, or oil, or turpentine, or other irritating substances, or burned with hot irons, or kept gaping for weeks, "to establish suppuration," or dressed with earth, cobwebs, pitch, or even excrement, are now simply thoroughly cleansed, closed as accurately as possible, and protected by the softest and lightest of dressings. In short, we simply follow our natural impulses, imitate the lower animals, and the result is that our mortality rates, after both accidents and operations, are reduced fifty, sixty, and even eighty per cent.

In fevers, for instance, the parched and gasping patient, instead of being swathed up to his neck in blankets, kept in carefully heated and darkened rooms, with doors and windows religiously closed, forbidden cold water, or indeed cool drinks of any kind, as if they were deadly poison, and systematically starved upon a "fever regimen" of slops and washes of every description, is now placed between the coolest of sheets, and with the lightest of covering, in cool, breezy, sunshiny rooms, systematically fed with the most nourishing and digestible of foods, given all the water and fruit-juice he can possibly drink, not only bathed, but even put to soak in cold water.

Our most modern and most successful treatment of typhoid fever consists merely of a liberal milk-diet, encouraging the patient to drink at least a gallon of water a day, and plunging him into a cool bath whenever his temperature rises above a certain point. Again, we simply respond to the demands of poor, hot, thirsty nature; and by so doing have lowered the death-rate from thirty per cent. to less than five per cent.

The value of instinct as a guide in morals is equally great, although there is here a certain amount of conflict between the individual or selfish instincts, and the social or altruistic ones. And, although it is true that the intensity of our necessary vital desires or appetites is ofttimes so great as to cause us to disregard the rights of others in their gratification, and thus violate our higher or social instincts, to sin, in theological language, yet it is also true, as beautifully pointed out by Darwin, that the former are essentially temporary in their duration, and capable of but feeble recollections, while the latter are absolutely ceaseless in their action and produce by their violation lasting sensations, such as shame, remorse, loss of respect, feeling of isolation, etc., which become more vivid with each successive recollection. In fact, the higher instincts, though at the time feebler, are in the long run more than a match for the lower. It would be strange indeed if these instincts, which have created morals, were not still to be trusted in their domain.

What, then, is our final conclusion? That moral-

ity is natural, and instinct the holiest impulse that stirs man's bosom. Truth is mighty, and sweetness and light are winning qualities (in more senses than one). Morality has won its pre-eminence by "the right of the strongest," and has no need of assistance or protection from revelation, church, priestcraft, or state. Still less does it owe its origin or continuance to any of them. And yet almost every religion, every priestly order arrogates to itself the position of the true originator and only conservator of morality. Heaven forbid that it should rest on any such narrow and shifting foundation. Beautiful and inspiring as the spirit of worship is, and valuable and powerful as its influence, morality depends upon no one emotion or influence, but upon all the forces and pulses of nature. All the warmth of man's nature, all the courage, the beauty, the vigor, of animal life, nay, even the beauty of the meadows, the sweep of the rolling tide, and the glory of the dawn, are in it and behind it.

Cut it off from the influence of any one of these, and it goes halting at once. Confide it to any one of these alone, and it withers and all but disappears. Even the religious instinct, for instance, must be balanced by the affections, the necessary appetites, the common sense of the masses, or the most painful and shocking perversions will occur. Of itself one of the purest and most exalted of emotions, it has earned itself as black a record as many of the vices, simply by having frequently been given unlimited sway over man's actions. The extremes of hatred,

bigotry, and cruelty into which it has been led are, alas, household words, and in hatefulness, though not in frequency, equal, if not exceed those prompted by any of the "fleshly lusts." "Our army swore terribly in Flanders," but its profanity was not to be compared in either profuseness or malignity with the maledictions of an ordinary "sacrament" of excommunication.

The wrath of the "natural man" is fully appeased by killing his enemy, or at most scalping him afterwards, but that of the "holy father" or "shepherd of the flock" cannot rest at merely burning the heretic, but must damn his soul through all eternity as well.

The superhuman is sure to become the inhuman sooner or later. How much of the cruelty, intolerance, unscrupulousness, fatuous folly, which have too often marred the whole record of the Roman Catholic Church, have been due to her management solely by a body of professedly sexless clergy, who by their unnatural vow of celibacy are cut off from all the softening, humanizing, ennobling, and refining influences of family life! What can they really know of the Great All Father, who are not and can never hope to be fathers themselves!

Morality is the flower born of all the struggling impulses of lowly but warm-hearted human nature, just as the violet is of the leaf-mold, the sunlight, and the dew. Any of the influences which had a share in its creation, alone would blight it, did not the others come to its aid. Gentle as it is, it is irre-

sistible and will flourish with equal placidity within our bosoms or among our ashes.

Beautiful, fragrant, and delicate though it be, it asks only the free air and sunlight of heaven, to defy alike the storm, the flood, and the tooth of time, and glorify the woodlands every spring until the sun grows cold.

CHAPTER IV.

THE BEAUTY OF DEATH.

HUMANITY has a faculty for ignoring and abusing its benefactors which amounts almost to a genius. Scarcely an age can be mentioned which has not starved its Homer, poisoned its Socrates, banished its Aristides, stoned its Stephen, burned its Savonarola, or imprisoned its Galileo. Nor is the strange perversion of sentiment confined to our fellow-mortals. The great, calm, stern, yet loving forces of nature have constantly fallen under the unjust stigma, and though we have outlived many early misconceptions or misrepresentations of most of these, a ghastly, repulsive, lying mask is still permitted to conceal the kindly, though stern features of pallida mors albeit both religion and science are striving hard to tear it away. Let us endeavor to lift up a tiny corner long enough to catch a glimpse of what lies behind it

I regard the prevailing conception of death as false in three important particulars: First, that it is in some way an enemy of, or opposed to, life; Second, that it is a process of dissipation or degeneration involving and associated with a fearful waste of energy, time, and material; Third, that it is a harsh, painful ordeal, from which every fibre of organic being shrinks in terror.

I am aware that my first contention will seem like a flat contradiction in terms, but a few illustrations will probably make my meaning plainer. Let us take those earliest and lowest results of formative tendencies in matter, the crystals, "the flowers of the rocks," as Ruskin beautifully calls them. Here we have individual units which for beauty, variety, and definiteness of form, brilliancy of color, and purity of substance, stand absolutely unrivaled in all the higher walks of life. Watch them forming, and see with what certainty atom seeks atom, here a diamond, there a cube, again a prism or rosette, each substance having its own definite, peculiar shape, with an utter disregard of all alien materials in the mass. Mark how crystal seeks crystal and proceeds to weave its own warp and woof, in column, in truncated cone, in spire, in lace-like web of slender needles, each according to its kind. See how the advance columns of the various ingredients of the mass, cut through, ride over, or yield to one another, in regular social order of rank, dependent not upon bulk or hardness, but upon purity of substance and organizing power, upon crystal vitality in fact, and suppress if you can the conviction that these organisms are alive. The only thing they lack is the inherent faculty of dying. Drown and dissolve them by fluid, fuse into shapeless masses by volcanic heat, and on the very earliest opportunity they will promptly and surely resume their former shape and beauty. Gentler influences

they defy. So long as they exist they are indestructible, and their lifetime is that of the everlasting hills. Here, if anywhere in the universe, is eternal life, in the popular sense of the term, but it were better named eternal death.

Crystal life is a bar of adamant to progress. Beautiful in itself, it is utterly barren, inhospitable, hopeless as regards future growth. It can neither grow itself, nor assist anything else to grow, save in one way, by dying.

The old earth shrinks a little in cooling, and our mass of crystals is suddenly elevated from cavernous depths to the top or side of one of those long wrinkles we call mountain ranges; the sun heats it, and the rains pour upon it, the frosts gnaw at its edges, until at length its vitality becomes impaired, and it succumbs to the elements. The whole structure crumbles into a shapeless mass of dull, damp, colorless, lifeless clay. Here, indeed, to all appearances is the desolation of death in all its hopeless repulsiveness. But wait a moment; here comes a tiny descendant of some crystal which has stumbled upon the faculty of dying and improved thereon unto the fifty-thousandth generation, a lichen spore, drifting along the surface of the rock. It glances forlornly off from the flinty faces of the living crystals, but finds a home and a welcome at once upon the moist surface of the clay. Filmy rootlets run downward, tiny buds shoot upward, the new life has begun. It ensuares the sunlight in its emerald mesh, entangles the life-vapors of the air in its web, and grows and spreads until the

valley of crystal death becomes transformed into a cushion of living green in the lap of the gaunt, gray granite.

But what as to further progress? The lichen is green and beautiful, but as an individual it can never develop into anything higher. Here again progress is absolutely barred by life, and must call death to its aid. The lichen dies, and its dust returns to the earth, carrying with it the spoils of the sunlight, the air, and the dew, to enrich the seed-bed. A hundred generations follow, each one leaving a legacy of fertility, until the soil becomes capable of sustaining a richer, stronger, higher order of plant-life, whose rootlets push into every crevice and rend the solid rock; the living carpet spreads; grass, flower, and shrub succeed one another in steady succession, until the cold gray rock-trough is transformed into the lovely mountain glen with its myriad life. As the poet sings, the crystals have risen "on stepping-stones of their dead selves to nobler things," and of any link in the chain the inspired dictum would be equally true that "except to die, it abideth alone."

But, says some one, this is all very true as to the surface of Mother Earth; but how about the deeper structures, her ribs and body bulk?

Every layer of the earth was part of the surface at one time, and the more intimately death has entered into their composition, the more highly organized the corpses of which they are composed, and the more useful and important they are.

Come back with me a few hundred years to the

great tree-fern period, and gaze upon the matted jungle of frond and stem, thirty to sixty feet in height, which covers mile after mile of swamp. Here, indeed, is life in all its glory, yet it is a living shroud. No hum is there of insect-life or twitter of birds that build their nests in the branches; for there is neither flower, berry, nor seed to support the tiniest life. No animal can live on its stringy, indigestible fodder. The rank growth crushes out any possibility of nobler, more generous plant-life. The old earth gives a tired sigh, her bosom heaves and sinks, and the waters rush in and cover the jungle, drown it, crush it, bury it with silt, compress and mummify it, and it is numbered with the "has-beens," until one day man stumbles upon a fragment of its remains in the face of some sea-cliff, and coal, the food of the steam-engine, the motive power of latter-day commerce and civilization, is discovered. Alive, it was a worthless weed; dead, it becomes "black diamonds."

There is another illustration very much in point, indeed, but so familiar through the medium of Sunday-school literature, and so nearly worn threadbare as a text for sermons, that I hesitate to allude to it. I refer to that exemplary being, the coral "insect." This sturdy little polyp anchors himself to the surface of the sunken reef, and with an industry and devotion that would do him infinite credit, if we could for a moment imagine that he was actuated by any other motive than that of filling his own greedy little stomach, he swallows and deposits in his tissues the lime-salts until his whole substance becomes

literally petrified and forms a stepping-stone of adamant for the succeeding generation, This process is repeated a few million times, and the lovely coral island, with its lofty palms, emerald verdure, silver sands, and glittering bird and insect life, breaks the surface of the howling waste of waters. Alive, he is a flabby, shapeless atom of grayish jelly; dead, he is a rainbow-hued crystal of loveliest outline—a thing of beauty in himself and the rock-ribbed support of countless other forms of life and beauty above the surface. Alive, he is an insignificant, slimy little salt-water slug; dead, he is a part of the framework of the universe, and a saintly creature, whose value as a moral example can hardly be overestimated.

When we turn to the higher forms of being, the dependence of life upon precedent death is so self-evident as to have been formulated into a truism. That the grass must die that sheep may live, and that sheep must die that man may live, are facts as familiar as the multiplication-table. If the command, "Thou shalt not kill," were to be interpreted to extend to our animal cousins and our vegetable ancestors, it might as well read at once, "Thou shalt starve."

In this sense death is as important and essential a vital function as birth, and the highest aim of many an organism is attained, not by its birth, but by its death. Literally: "He that loveth his life shall save it," in the world to come. Without this power of the lower life to forward the higher life by dying, progress of any sort would be absolutely impossible. There be forms which when they are devoured refuse

to die, but we call them parasites, and should hardly choose the tape-worm as a symbol of progress.

Even when we reach the human stage where no such direct digestive transformation into higher forms is possible, the same necessity is still apparent.

To permit progress in the social, political, or moral worlds it becomes ultimately just as sternly essential, cruel as the fact may seem at first sight, that the old generation should die, as that the new should be born.

Now let us look for a few moments at the second prevailing misconception of death as a destroyer and waster. This is apparently supported by a vast array of facts, ranging from the tremendous loss of life among the eggs or young of the lower forms to the sudden cutting short of existences in which meet the labor and preparation of generations of the past and the hopes of the future. What is the use of being born only to die, of laboriously building up an organism or character only to have it destroyed, annihilated, scattered like smoke?

To the first part of the question the answer almost suggests itself, viz., that this destruction is only apparent. Nothing is really lost at all. Merely the form is changed, and as it is necessary that life should be produced in great abundance in order to give nature, figuratively speaking, a wide field for selection, some method becomes absolutely indispensable by which the elements of the unfit, incompetent, nonelect forms can be promptly returned to the great crucible of nature, there to be available for use in

new and improved patterns. So far from being a waster, death is the great economist of nature, enabling her to conduct her most extensive experiments with a mere handful of material.

But you will reply, this accounts only, so to speak, for the materials used. Are not the vantage ground so hardly won, the wonderful organizing power, the long years expended, utterly lost and hopelessly wasted? I answer, no; but rather secured thereby. They become an immutable part of the history of the race. The upward growth of the race is not an even, continuous line, but a series of ever-ascending tiny curves, each the life of an individual, and the tiny shoot of the curve of the life that is to follow is given off from near our highest point.

Death is the great embalmer, the casket into which our loved ones are received in the very flower of their beauty and the glory of their strength. A sheaf of corn fully ripe is a beautiful, dignified, inspiring sight and memory, but it must be *reaped* to make it so, and not left on the stem to rot and freeze.

And it should not be forgotten that so long as life lasts, not only is growth possible, but degeneration also; and that the further the zenith of power is passed, the more probable does the latter become. Nothing can imperil the good that a man has done save his own later weakness, treason, or folly; and when the mortal dart pierces him it transfixes him where he stands and secures the vantage-ground he has won. Death's function here is, as it were, a ratchet upon the notched wheel of human progress,

to secure every inch gained as a starting-point for the life to come.

But the crowning beauty and noblest impulse of the process is that it is intrinsically a burying of the old life to enrich the new. The parent form falls with all the sears, the weariness and grime of the conflict, into the gentle lap of Mother Earth, in order that the new life may rise, fresh, pure, triumphant. Old errors are buried, old failures forgotten. The good of all the past is inherited, the evil falls by its own weight. The race takes a fresh start every generation. We are all but drops in the grand stream of life, which flows with ever-widening sweep through all the ages.

We are immortal, if we but form a true, sturdy link in the great chain of life. It is this unbroken continuity of life, ever rising to nobler levels from the ashes of apparent death that is so beautifully typified by the Phænix and similar traditions. We should cheerfully pay the debt of nature, proudly confident that she will be able to invest the capital to better advantage next time, from the interest we have laboriously added to it.

There need be no shrinking dread of the "pangs of dissolution," the "final agony," for such things have little existence save in disordered imaginations. Ask any physician whose head is silvered over with gray, and he will tell you that while disease is often painful, death itself is gentle, painless, natural, like the fading of a flower or the falling of a leaf. It is literally true that there is a time to die as well as to

live, and when that time comes the event becomes not only tolerable, but, like all other natural processes, desirable; every fibre of our tired, worn-out being demands it.

The overwhelming majority of such records of authentic "last words" as we possess, re-echo the saying of Charles II. on his death-bed: "If this be dying, nothing could be easier."

Even in such an extreme case as death under the fangs of wild beasts, all those who have gone very near the Valley of the Shadow from this cause unite in testifying, incredible as it may seem, that after the first shock of the attack there is absolutely no sensation of pain.

For instance, Livingstone, upon one occasion, was pounced upon by a lion, which felled him to the ground, and, making his teeth meet in his shoulder, dragged him a considerable distance into the jungle before his followers could come to his assistance. Livingstone asserts most positively that he was perfectly conscious of what was happening when he was being carried, could hear the cries of his friends, and wondered how long it would take them to reach him, but that he felt no pain or fear whatever, nothing but a strange, drowsy, dreamy sensation. And yet his shoulder was so severely injured that he never fully recovered the use of it, and his body was identified after death by the scars.

Sir Samuel Baker reports a similar experience with a bear which he had wounded. The great brute felled him by a stunning blow from its paw, and he was aroused to consciousness by its crunching the bones of his hand; it continued the process up his arm, and had almost reached the shoulder before the rescuing party could reach him, and yet Sir Samuel declares that he felt no pain whatever, and that his only sensation was one of intense resentment against the beast for seeming to enjoy the taste of him so much. Nor are these by any means exceptional instances, as many other such reports could be collected, and it is almost an axiom with surgeons that the severer the injury the less the pain. Many a man has received his deathwound and never known it until his strength began to fail.

But nature is even more merciful than this. trary to popular impression and pulpit pyrotechnics, the fear of death, which is so vivid in life and health, absolutely disappears as soon as his hand is laid upon us. Every physician knows from experience that not one person in fifty is afraid or even unwilling to die when the time actually comes, and in the vast majority of instances our patients drift into a state of dreamy indifference to the result as soon as they become seriously ill. So universally is this true that we seldom feel any uneasiness as to the result of a case in which a lively fear of death is exhibited. The highest sensibilities are the first to die; so that both pain and fear are usually abolished, literally rendered impossible, hours, days, or even weeks, before the end comes. Our dear ones drift gently out into the sea of rest, on the ebbing tide of life, with a smile upon their sleeping faces.

For every minor injury nature provides a remedy; for every hopeless one, a narcotic.

In not a few instances this indifference becomes changed into positive longing for death. Days of suffering and nights of sleepless weariness quickly bring men to stretch out their arms to the great Restbringer. Fever-parched and pain-weary men and women long for death as tired children long for sleep. Ask your own family physician and he will tell you that as a matter of fact he has heard five prayers for death to one for life, when fate is trembling in the balance.

Because the thought of Death in the noontide of life sends a chill through them, people never stop to think that their feelings may entirely change with the circumstances, and will not understand, as the good old Methodist elder shrewdly expressed it, that they "can't expect to get dying grace to live by."

The ghastly in articulo mortis, or "death-struggle," of which we hear so much in dramatic literature, religious or otherwise, does not occur in one case in ten, and then usually long after consciousness has ceased. When death comes near enough so that we can see the eyes behind the mask, his face becomes as welcome as that of his twin brother, sleep.

CHAPTER V.

LIFE ETERNAL.

LIFE is the greatest thing in the world. It is a pleasure simply to exist, to respond to our environment, to absorb the forces of nature, to grow and to help others to grow. What wonder, then, that the darling desire of man's heart, in all ages, is to secure Life Eternal.

But is it not possible for this instinct, this passion, like any other, to overleap itself? May we not, by unduly exalting its importance, by dwelling upon it to the neglect of other equally God-given impulses and desires, develop it into positively abnormal if not morbid forms? Can we not by cherishing false ideals in connection with it, fall into serious error, and even so change its tendency as to make it a source of more distress, apprehension, and bitterness, than of joy, confidence, and hope?

It is hardly necessary to answer the question; it not only may be, but it has been done in many a demonology and also in not a few theologies, until at more than one period of the world's history, men have been, in the pathetic language of the Great Apostle, "through fear of death, all their life long, subject to bondage." Like any other instinct unbalanced by counteracting impulses, given a per-

manent majority in the parliament of tendencies and relieved by ecclesiastical sanction from liability to executive veto, it has too often brought its own punishment with it, and has quadrupled the natural fear of death by the dread of what may follow in the "life beyond." That tragedy of the ages, "Hamlet," is at heart a titanic picture of a noble nature, a courageous soul, a magnificent intellect, palsied, unbalanced, and ultimately all but ruined by too keen an appreciation of the possibilities of the after-world. At every turn his "native hue of resolution is sicklied o'er with the pale cast of thought "-of this thought —his religious longing for vengeance upon the skulking assassin, his fierce desire to be the instrument of heaven's retribution, when failing him no other can be, are sternly suppressed lest he should "couple Hell" with his mission of justice. This leaves him inspired by absolutely no o'ermastering passion save a sense of the horrors of his father's condition and the utter hopelessness of relieving them by any effort on his part. What wonder this failed to spur him to action? His constant fear is that the ghost "may be a devil" who "out of my weakness and my melancholy abuses me to damn me." Contrast his attitude with that of that commonplace, but hot-blooded young fellow, Laertes, who bursts into the presence of royalty itself with the furious declaration,

"To hell allegiance.
To this point I stand
That both the worlds I give to negligence.
Let come what comes, only I'll be revenged
Most thoroughly for my father."

Which is the nobler attitude, the "natural" or the "celestial" one. Hamlet refuses to slay the vile murderer of his father, because for sooth he finds him at his prayers, and dreads that this may bar his punishment in the future world and send him to heaven, which would be "hire and salary, not revenge." He utterly and fatally mistakes the proportion of things in this life by persistently regarding them in the light of a future one. And we have most of us, alas, been personally acquainted with a Hamlet.

The earliest and perhaps most commonly accepted conception of eternal life is, that inasmuch as our life here is in the main happy and desirable, all that is needed to insure our eternal happiness is an indefinite continuation of our personal existence. It is this childish view which is still largely responsible for the way in which we, even in the nineteenth century, regard death as the "King of Terrors," the chief of evils, and the one great blot upon the face of nature. Theologically it has developed into the theory that death is a punishment for and result of sin, and it is generally assumed to have come into the world at the Fall in the Garden of Eden, although, strangely enough, there is absolutely no foundation for such a conception of death in the narrative of that matchless parable itself, and very little in any other part of Scripture outside the splendid imagery of Paul. Indeed the poem itself implies the contrary, inasmuch as our first parents were turned out of Eden "lest they eat of the tree of life and live forever," cease to be mortal, in fact. In short, this

view of death is taught neither by science nor by Scripture, reasonably interpreted. Death is essentially a vital process of transcendent importance, a blessing instead of a curse, a reward, not a punishment.

Whence then comes this fear of death of which we hear so much and which is so continually appealed to as one of the most overmastering passions of humanity. Is it a natural or a manufactured dread? Mainly, the latter.

There is unquestionably a genuine natural basis for it in the instinctive shrinking from the pain of wounds, the weakness and weariness of the sick-bed, the thickening speech, the darkening eye. A natural dread of ceasing to live, to enjoy, to feel, of leaving the sunshine, the music, the loving and fighting behind us. But these are comparatively slight and transient feelings, which shrivel in a moment in the glow of any powerful emotion, such as love, or ambition, even hunger, or revenge. As Bacon quaintly remarks: "It is worth the noting that there is no passion in the mind of man so weak, but it meets and masters the fear of death."

There is also the shudder at the pall, the hearse, Seneca's "array of the death-bed which has more horrors than death itself," the darkness and cold of the tomb, the tooth of the worm, the rain and the storm. But this disappears almost as soon as our attention is called to it, for science assures us at once that the body cannot, and religion that the soul does not, reck aught of any of these.

The main and real bitterness of death is the dread of a Future Life.

One of the principal "consolations" of religion consists in allaying the fear which it has itself conjured up. "Men fear death as children fear to go in the dark, and as that natural fear in children is increased with tales, so is the other." (Bacon.)

The simplest and most primitive form in which this widespread idea of a personal existence after death is found to exist is in the religious beliefs of most savage tribes of a low grade of culture, such as the Tasmanians and Australians.

Here is simply a vague belief that the souls of men become demons or spirits after their death and evidently owes its origin to the appearance in dreams of the images of ancestors or deceased friends, thus proving to the aboriginal mind that they still exist. These ancestral ghosts, together with the demons of the streams and storms receive a fitful sort of worship, to keep them from injuring the living. There is, of course no idea whatever of reward or punishment in this "heaven," and the "immortality" conception is not confined to human beings, but extends also to animals and things such as weapons, utensils, and ornaments which are seen upon or in the hands of the dream-visions aforesaid, and are accordingly buried or burned with the corpse, that their ghosts may accompany him to the hereafter. A curious survival of this conception is still found in our modern and medieval ghost-stories, which invariably describe the spirit as appearing in the "ghosts" of the clothes in which he was buried or murdered, for instance the apparition of the elder Hamlet was "arméd at point exactly cap-à-pie," and his son exclaims at once, "My father in his habit as he lived!"

As the tribe rises notch by notch in the scale, these vague and misty fancies assume gradually more and more definite and orderly forms. A sort of order of rank is established among the ancestor ghosts and "forces of nature" demons, and from the chief among them are selected patron spirits and deities of the tribe. Thus the gods are born. Corresponding with this increase of dignity comes the necessity of a definite place of residence for beings of such exalted rank and the "hereafter" or "future-world" is assigned to them whither the spirits of the dead resort to become their subjects, and Heaven is invented. This is usually situated on the other side of some impassable mountain-chain, or across the nearest lake or ocean, or at the end of some cavern in the bowels of the earth: anywhere in fact that no member of the tribe has ever penetrated. This conception is gradually developed and embellished until it reaches the familiar "Happy hunting ground" stage, so well exemplified in the legends of our North American Indians. This future life is a frank and obvious copy of the present one, a gilded and rose-colored reproduction and continuation of the joys of earthly existence.

[&]quot;Heaven but the vision of fulfilled desire, And Hell the shadow of a soul on fire,"

It has been held in identical or strikingly similar forms by almost every tribe or race in the world: in the upper stages of savagery, the lower and middle of barbarism, and even on into well-developed stages of civilization. It is or was the belief, for instance, of tribes so widely separated in space, in time, and in culture as the South Sea Islanders, the Tartars of Siberia, the Apaches, and the Germans of Tacitus's time, our own ancestors.

Mutatis mutandis the spirits of the dead hunt the spirits of the buffaloes, which never cease to be plentiful, over prairies which are green the year round, upon horses which never tire, and with weapons and garments that never grow old.

One of the most interesting things about this stage of the belief is (that as in the former one) the immortality is not confined to human beings, but embraces the animals of the chase, horses, dogs, bows and arrows, cooking utensils, garments, and even articles of food. The buffalo which the spirit of the good Indian pursues over the evergreen prairies are the spirits of those which he has killed during his lifetime. The ghost of his favorite horse while on earth bears him in the chase, the soul of his faithful dog keeps him company, the ghost of his former trusty bow is in his hand, the shade of his treasured necklace of bears'-claws encircles his phantom neck. Great pains have been taken and heavy expense incurred in order to bury all the latter with him; horse, dog, weapons, costly furs, wampum, priceless ornaments, nay, even food and tinder-box so that

their spirits may accompany his on his distant journey. This originally kind and charitable ceremony has developed unfortunately into some of the most hideous and ghastly rites known to history, such as the killing or burning of wives, soldiers, musicians, servants and others upon the grave or pyre in order that the dead man may have the benefit of their company and services. And an obvious survival of this idea still exists in the senseless and at times even ruinous pomp and display of modern funerals with their long and imposing procession of mourners and civic, military, or fraternal organizations. In military funerals a still more obvious remnant is seen in the custom of leading the dead man's horse directly behind the coffin to the grave.

As the tribe grows, expands, and advances, ships are built, wars are waged, voyages and expeditions of discovery undertaken until geography is born and the idea of a future world somewhere upon the earth's surface has to be abandoned. Henceforward it is relegated either to the region of the sky, whose name "heaven" is still borne by the most advanced and modern conception of it, or to the bowels of the earth as its other classical modern name the "infernal ('inferior') regions" still implies. In most cases the belief soon comes to include both localities. The higher as the abode first of the gods and heroes or princes of the highest rank only, who were thought worthy to become "immortals" and later by degrees of the pious and faithful of all ranks. The lower as the destination first, of all the lesser divinities and

all ordinary mortals of whatever degree of moral merit, and later gradually changing to a place of exile and punishment for rebellious demons and criminals, unbelievers, heretics, and offenders of every description.

A well-known illustration of the early form of this stage of the idea is the Greek Olympus-Hades. The "upper" world did not even quite reach the sky, but was on the summit of Mount Olympus and was tenanted solely by the gods and a few nymphs and mortals of such extraordinary merit, beauty, or direct blood-relation to the divinities as to render them worthy of elevation to divine honors. The "lower" world was a cold, comfortless, shadowy region below the earth, where the shades of all mortals, save the brilliant exceptions mentioned, were condemned to pace out a monotonous existence in the meadows of asphodel. Even such redoubtable heroes as Achilles, Agamemnon, and Hector could not escape it. Although there was no idea whatever of punishment or disgrace connected with it and Pluto was merely an inferior divinity who acted as governor-general of the region, yet there was nothing cheerful or attractive about the conception and much that was repulsive.

The shades were represented as being literally "ghosts of their former selves," still bearing and showing the wounds that caused their death, mourning the loss of their joyous earth-life, their friends, their horses and cattle, their wine and gold, their very voices faded to a gibbering squeak. Achilles longs to come up to earth again, even though it were as the

meanest slave that toils. The devoutest Greek departed this life with extreme reluctance and nothing but sighs and regrets for the joys he was leaving. He made all he possibly could out of this life, for he expected nothing in the next. And take him altogether he was about the best and most useful citizen the world has ever had and has actually achieved the most glorious immortality. Perhaps on this very account.

Cruder in some particulars and infinitely less artistic, but with a rough justice and fearless manliness about it which lifts it really far above Olympus, was the Valhalla of our fierce Norse ancestors. This has many points of resemblance to the happy hunting-ground stage, for we find the heroes,

"In the halls where Runic Odin howls his war-song to the gale."

seated around the massive board, loaded with the souls of their favorite meats, drinking mead out of cups which could never be emptied, issuing forth every morning, not only to fight but actually to slay and be slain in furious combat, victors and vanquished alike, however, recovering from their wounds, or coming to life again, in time for the night's carouse. It was a frank copy of the joys of this life writ in large childish characters; its naïveté reminds one of the enthusiasm of a celebrated surgeon who declared that if there were no amputations in heaven he didn't want to go there. It was essentially a fighter's paradise, to which only warriors and their wives, mothers, or daughters could gain admittance. Its

passport was death in battle, and the warrior who was luckless enough to die a "straw-death" would have himself scratched with a spear in order that he might come before its gates with Odin's mark. It was far in advance of Olympus in that it was not reserved for the especial favorites of capricious gods, but could be claimed as a right by every warrior (and all men were such in those days) who had reached a certain standard of bravery and truthfulness. The vast majority of the race, however, were forced to content themselves with an abode in chilly, foggy regions in the bowels of the earth, presided over by the earthgoddess Hela, whose name has been modified into our modern "hell." There was no thought of punishment, or even of disgrace, except perhaps such flavor of it as might be implied in failure to reach Valhalla: it was simply a dreary, monotonous, colorless existence, a sort of necessary old age after the fierce, loving, fighting youth of this life. If the Norse ideal of heaven was far below the Christian, its hell was a far more humane conception than that fierce and gloomy Oriental idea to which its name has been transferred and which has become by a sad travesty the peculiar possession and pride of the "Gospel of Love."

The Mohammedan Paradise was another conception of the same class, higher in that it recognized broader grounds of admission than simple war-like courage and truthfulness, but infinitely lower in the purely sensual and self-indulgent and almost degenerating character of the rewards offered, the exclusion

of woman except in so far as she can gratify man's passions, and the recognition of "faith" as a substitute for "works." Its houris, its palms, its divans, its fountains, its delicious fruits, its gardens, are such obvious and vulgar reproductions of earthly ones, that there is little difficulty in believing the story told by certain historians that Mohammed actually constructed such a "paradise" as the Koran describes in some lovely but inaccessible mountain-valley, to which from time to time certain of his faithful followers would be transported while under the influence of an opiate. After being permitted to remain there a few hours or days their food would again be drugged, and they would be brought back to their tents to testify to others on their return to consciousness that the half had not been told. Like Valhalla, death in battle against the infidel was its surest passport, and the reckless bravery which this belief developed in the two races is, to say the least, a highly suggestive commentary upon our statement that the greatest part of the fear of death is the dread of what may happen in a future life.

Another great group of beliefs, the Egyptian Mysteries, have so completely succeeded in remaining what their name implied (as indeed they were intended to) that little or no definite idea can be formed of their conception of a future life. All we can catch is occasional glimpses of an ever-shifting and misty group of deities, some in animal, some in human form, Osiris and Amenti, Thoth and Ptah, Anubis and Isis, whose only definite function appears

that of a court of inquiry and judgment upon the souls of the dead. They require a strict account of the deeds done in the body, the heart of the dead man is weighed in the scales of Truth, etc. Morality rather than piety seems to be demanded by them, but as to the nature of the rewards granted or punishments inflicted we are left almost entirely in the dark. Simply a dim but majestic vision of a judgment after death in which Virtue is its own reward and Sin its own punishment.

The most singular conception of the life to come is that held by that religion which in age, dignity, and number of adherents stands at the head of the great world-religions. At first sight it appears to be the very apotheosis of pessimism and nihilism, and yet it is the most ingenious, philosophic, and logical working-out of the supernatural idea which the world has ever seen. Much of its thought is magnificent; its great fundamental conception that the only thing which is immortal is character (karma) and that a million generations have been needed to develop it, that many of its stages are passed in animal form, and that there is an essential, spiritual relationship between men, animals, and even plants, is not only matchless in its poetic beauty, but almost scientific in its truthfulness.

The transmigration of souls is a mystic foreshadowing of Darwinism. It is by far the justest and most sweetly reasonable conception of an individual future life which has ever yet been developed. But like other religions it is weakest at the point of which

it boasts itself most loudly. Its scheme of development up to the level of "Homo integer vitae" is superb in its insight, its logic, and its truthfulness. Its view of the past is inspiring, noble, but for the future it has nothing to offer but a wearisome and intolerable repetition of former stages of incarnation, until at last in the very weariness of despair the soul is glad to take refuge in Nirvêna, "neither-consciousness-nor-unconsciousness," "absorption into the soul of the universe," individual annihilation, eternal rest.

The desirableness of Nirvâna has also been justified by some Buddhist sages from the same theological standpoint on the familiar priestly ground that existence is desire and desire is sin! therefore only by destroying existence can sin be destroyed and the summum bonum reached. Again, like most religions. it is imposing while generalizing upon the past, but it fails when it attempts to forecast the future. As a scheme of the past, it is beautiful, fascinating; as a scheme of the future, it is found wanting. And just as elsewhere the prospect of a gloomy after-world has multiplied tenfold the fear of death. But it is a superb allegory. Rid the puny individual of this world-burden of unending existence and eternal responsibility; let the growth of karma be that of the race, and each incarnation a new, glad personality; let the good that was in each, in its influence and its memory become a part of the constitution of the race -immortal in fact, and the Darwinist may declare to the Buddhist as Paul did to the Athenians on Mars,

Hill, "Whom therefore ye ignorantly worship, Him declare I unto you."

And indeed there are many sayings in the teaching of the Buddha, as Paul Carus has shown in his beautiful "Gospel of Buddha" which give ground for the belief that such was his real conception, though necessarily veiled in the parables in which he spoke. Certainly some of his most spiritual and gifted followers to-day hold very nearly this view of karma and Nirvâna and profess a creed which is more nearly ideal both from a devotional and an evolutionary point of view than almost any other which is formally accepted by any western church to-day.

When we attempt to study that view of the future life known as the Christian Heaven, we quickly find that we have to deal with two almost wholly distinct and widely different conceptions. One of these is the popular, orthodox "Heaven" of the prayer-meeting and Sunday-school, and the other is the "Kingdom of Heaven" of Christ's teachings, two utterly dissimilar regions.

The essential features of the old-fashioned orthodox heaven are briefly, a city of great beauty whose streets are paved with pure gold, whose twelve gates are constructed each of a single pearl, its walls of jasper and its foundations of precious stones. There is no night, and no sea; while through the midst of the city flows a sparkling river with ever-bearing fruit-trees on either bank. Here the redeemed abide forever and ever, clad in white and shining garments, with crowns of gold upon their heads, with harps and

palm-branches in their hands. They also acquire the power of flying and become "angels." Their entire time is occupied by chanting praises and bowing down before a great white throne; as all mysteries are revealed to them there is no need of mental effort, and as there is neither hunger or thirst or pain of any kind, bodily effort is equally unnecessary. In short, it is as one godly old hymn-writer has expressed it, a place "where congregations ne'er break up, and Sabbaths have no end."

To this wondrous city, souls of all true believers are carried immediately after death by certain winged beings known as angels: to find one of the gates aforesaid either barely "ajar," half shut, or flung widely open for their admittance, according to the degree of their merit. The redeemed all become young and beautiful, yet retain enough of their earthly likeness to be readily recognizable by all their friends who have preceded or who may follow them. They are welcomed at the gate by the former and themselves look eagerly forward to the coming of the latter. This is bad enough, but it is reserved for a very small minority of the race as a special favor.

Not far from the walls of this city, separated from it only by a great gulf which is so narrow as to readily permit recognition to take place across it, is a fiery pit, the abode of the lost. Here nine-tenths of the race are condemned to writhe through all eternity, tortured by blistering heat, by raging thirst, by suffocating sulphur-fumes, and every agony that the ingenuity of devils can devise, so that in clear view of

the beautiful city, "the smoke of their torment ascendeth for ever and ever." So close are these poor wretches to the jasper walls that their cries for mercy can be distinctly heard, as in case of Dives and Lazarus. From a mere human standpoint, one would have supposed that this would have somewhat interfered with the peace of mind of the redeemed, especially as they could readily recognize the voices of a majority of their friends and loved ones: but their dispositions have become so spiritual and celestial that it does not distress them at all; indeed, one good Calvinistic divine has specially dwelt upon the watching of the tortures of the damned and congratulating oneself upon escaping therefrom, as one of the joys of heaven.

Of this whole popular conception, it may simply be said that it is almost absolutely without foundation in the teachings of the Master; that what little part of its imagery is biblical is taken chiefly from the Revelation of John, a book which is now declared by a majority of orthodox critics to be a burning picture of the persecutions under Nero and mystic prophecy of the ultimate triumph of the early Church without any reference to the future life. As to its theory that the souls proceed to heaven at once after death, the gospels are so vague that it is impossible to decide whether this passage occurs before or after the Last Judgment; the churches themselves have differed widely on this point, and one large body still holds that souls sleep in the grave with the body until awakened by the "Last Trump." Its "recognition" hope is nowhere distinctly stated and barely

implied in three passages, while as to its belief, that our souls become angels and that the latter have wings, it has not a word of support in the Scriptures. Its inferior and attendant spirits are taken bodily from the pages of Dante and Milton. In short, it is simply a "Happy Hunting Ground" rearranged according to saintly and feminine ideas, combined with a Hades which for injustice, atrocity, and savage vindictiveness is unparalleled even in Dahomey.

The "Kingdom of Heaven," "Kingdom of God," "Life Everlasting" of the Master's own teachings is a conception of widely different form and temper. Its description consists principally of a noble strain of lofty and fearless prophecy, of the ultimate triumph of Good and defeat of Evil which throbs like an everrecurring Leitmotiv through all of the Four Gospels. Like all true music it is beautiful, entrancing, sweetly mysterious. Its lofty beauty is marred by no childish working-out of trivial details. The great chord is struck by a master-hand, and the quivering over-tones of each responsive heart are left to finish the melody. "Every work of man shall be brought into judgment, whether it be good or whether it be evil." Righteousness and Truth shall and must prevail. and falsehood will certainly both punish and defeat themselves: "the meek shall inherit the earth;" this is the burden of His song. As to the geographical where, and the chronological when, He is divinely silent. It is enough for us to know that it shall be hereafter and that it begins now: nay, that this divine process is actually going on within us, about

us, among us, if we will only open our clouded eyes to see it. The Eternal Life of the Master is now, and has been from all eternity. "He that believeth on the Son hath everlasting life," His commandment is life everlasting. "The Kingdom of God is within you." "This is life everlasting, that they may know thee, the only true God."

This is no mere endless prolongation of petty, individual existence. It is something far nobler and higher than this. Hear Farrar's burning words:

"The use of the word aiwviog, and of its Hebrew equivalent, olam, throughout the whole of Scripture, ought to have been sufficient to prove to every thoughtful and unbiased student that it altogether transcends the thoroughly vulgar and unmeaning conception of 'endless.' Nothing, perhaps, tends to prove more clearly the difficulty of eradicating an error that has once taken deep and age-long root in the minds of 'theologians,' than the fact that it should still be necessary to prove that the word 'eternal,' far from being a mere equivalent for 'everlasting,' never means 'everlasting' at all, except by reflexion from the substantives to which it is joined; that it is only joined to those substantives because it connotes ideas which transcend all time; that to make it mean nothing but time endlessly prolonged, is to degrade it by filling it with a merely relative conception which it is meant to supersede and by emptying it of all the highest conceptions which it properly includes."

As to a continued individual existence after death it is nowhere definitely taught by the Master, and is only even implied on any broad and reasonable principle of interpretation in three of his sayings. This may seem an extreme statement, but I challenge proof

to the contrary from the Gospels. The three passages alluded to are the parable of Dives and Lazarus, the decision upon the case of the woman who had had seven husbands, and the promise to the thief on the cross. The first of these is a parable pure and simple, spoken to the scoffing, sneering Pharisees. The story is taken directly and bodily from Rabbinical literature—a weapon from their own armory turned against them with deadliest effect. If it be regarded as anything more than this it is bathos, for it depicts a state of affairs which would be almost more intolerable for the saved than for the lost.

In the second instance the question is squarely asked and an answer distinctly declined. All that the Master youchsafes in his wisdom is that Abraham, Isaac, and Jacob are still "living" (of which the whole Jewish nation was bodily proof), but as to the woman in question, "in the resurrection they neither marry nor are given in marriage, but are as the angels of God." To the dying thief were spoken the thrilling words, "This day shalt thou be with me in paradise." And was he not? Yea, verily, in the paradise of the love and sympathy of all Christian hearts through all the ages since and to come. If it is to be taken literally, what are we to make of Christ's saving to Mary, two days later in the garden of the sepulchre, "Touch me not, for I am not yet ascended unto my Father."

All other references of this sort which have even the appearance of being personal are to a mysterious "second coming," "in the clouds of heaven," which it is distinctly stated, shall take place within the lifetime of that generation (Matthew xvi., 28; Mark xii., 25; Luke xx., 35, and xxiv., 34), but as to whose occurrence history is silent. All other allusions such as "If a man keep my commandments he shall never taste of death," "In my Father's house are many mansions," are not only as well, but better explained by referring them to the ultimate triumph of Good and the deathlessness of Truth. Why, when Christ distinctly tells us that "the Kingdom of God is within us," that "to know God is life everlasting" and that He is the Resurrection—the bewilderingly beautiful instance of the Creation of Life out of the dust of the earth—we should obstinately persist in referring and postponing all three to some mysterious future region, "beyond the skies and beyond the tomb," is hard to understand. Even that matchless epitome of the wants and aspirations of the human heart, the Lord's Prayer (Revised Version, Luke), contains not a word of allusion to such a region. The grandly majestic "Last Judgment" is the Verdiet of History, and nothing could be more "unorthodox" than its superb criterion, which is neither creed, nor faith, nor even intentional service of God ("Lord, when saw we thee an hungered and fed thee?"), but the broad and noble principle of common humanity, "Inasmuch as ye did it unto the least of these my brethren, ye did it unto me."

In short, the "Ζωή αίωνως" of Christ is literally the "Life of the Ages" of Darwin.

To what conclusion, now, are we led by this review of the type-religions of the world, as to the effect of a belief in a future life upon the fear of death. one seems possible, that it increases it fivefold. happy hunting-ground is reserved only for chiefs and warriors of highest renown, and many are the risks which even these have to run upon their passage thither. Only a few of the most favored of mortals can hope to scale Olympus. The halls of Odin open to none save heroes of high renown or faultless courage. The Paradise of Mohammed is reserved for the faithful who have sealed their devotion with their blood, and admits neither women nor children. Nirvana is a "heaven" of such doubtful attractiveness as to require a good deal of philosophy to enable one to contemplate its attainment with resignation; while as to the orthodox Christian heaven: "Strait is the gate and narrow is the way that leadeth unto Life, and few there be that find it." Its most enthusiastic proclaimers do not offer the hope that more than a very small percentage of the race will ever reach it. Indeed, they seem almost inclined to gloat over the prospect of having it all to themselves. None but "desirable" people will be admitted there, they trust. In brief, every conception of an individual future life condemns the vast majority of men to a state of either cheerless, ghostly gloom, or of absolute torment. Destroy such a belief and you rob death of half its terrors. 'Tis not dying that men dread so much as living again, and "thus conscience doth make cowards of us all."

As to the so-called "restraining influence" of such a belief and the extent to which it supports and enforces morality, the more attentively this is considered, the less will be found to be its value. High, noble natures need no such incentive; base ones are but little affected by it. Assure a scoundrel of immunity from punishment in this world, which is unfortunately usually implied in the orthodox view, and he will risk the next one. If he is willing to run the gauntlet of the immediate constable and jail, how much more that of the remote possibilities of hell? The criminal is essentially the man who blindly gluts the craving of to-day, with an utter disregard of to-morrow.

Besides, there is always the chance of a "deathbed repentance" and usually that of buying absolution by devoting part of the spoils to the Church. "Charity covereth a multitude of sins." In Catholic countries it is notorious that the more colossally villainous the brigand the more devout his piety and magnificent his offerings. Indeed, a distinguished English penologist (Havelock Ellis: The Criminal) goes so far as to open his chapter on "The Religion of the Criminal" with the horrifying remark, "In all countries religion or superstition is intimately connected with crime." As a check for the well-disposed it is unnecessary; for the ill-disposed, worthless, or worse. Furthermore, it must not be overlooked that whatever value belief in a future life may have in this respect has to be offset by the torturings, human sacrifices, funeral victims, "head-hunting," childburning, Jesuit massacres, thuggism, "infant-damnation," Mormon polygamy, and other such observances and beliefs which are inspired by it alone.

We personally fought at the battle of Hastings and shall in Armageddon. We are a part of all that ever has been or is to come. We have lived from the earliest appearance of life upon this cooling globe and shall live through all eternity in our descendants or in those whose existence ours has helped to make possible. All that is true, all that is good, all that is brave and virtuous, that "makes for righteousness" in us and in our influence cannot die, but has become part of the framework of the universe, has been painted in the great picture-gallery of nature to bless and cheer generations yet unborn. This, to my vision, is the true "Eternal Life," or as Ζωή αλώνιος is better translated "the life of the æons," "The Life of the Ages." All in us that is base, all that is cowardly, all that is untrue, falls by its own weight, decays by "the worm that dieth not," is consumed by "the fire that is not quenched."

What wonder that the righteous are described as "saved," and the unrighteous as "lost." The question of salvation becomes, not the selfish one "Shall I as an individual live after death in a state of happiness or misery?" but the nobler, unselfish one, "How much of all my work, my character, my influence, my self will become part of the progress of the race and of the history of the universe?"

All faiths, all views agree in this one grand, consoling thought, that every brave deed, every noble effort is of itself immortal. That the good cannot die, and that every effort, however feeble or apparently unsuccessful, to make the world happier for our having lived in it, shall have its reward.

CHAPTER VI.

LOVE AS A FACTOR IN EVOLUTION.

ONE of the most firmly-rooted and widespread popular misconceptions of the struggle for existence is that only so-called "brute" or selfish qualities are concerned in it. It is assumed to be a relentless and ceaseless war of extermination, whose watchword is, "every man for himself," and in which no quarter is or can be given. Strength, selfishness, and ferocity, "the qualities of the ape and the tiger," are the only qualities concerned in or developed by it. The idea of love, of sympathy, of self-sacrifice playing any part in it, is regarded as simply absurd. Indeed, the possession or display of any of these qualities is gravely declared to interfere with its legitimate result,—the survival of the fittest. Even by those who admit that this cosmic process is sufficient to account for the physical or animal characteristics of man, it is emphatically affirmed that his mental and moral qualities have been acquired not by virtue of it, but in direct opposition to it. Not even the old Calvinistic distinction between "Nature" and "Grace" was more sharply drawn than that between the egotism born of the struggle for existence and the altruism demanded in the ethical

and moral sphere. Nor is this impression confined to the popular mind, for no less revered an authority than the lamented Huxley in that most painful and deplorable "swan-song" of his, The Sheldonian Oration of 1893, declares that what we call goodness or virtue involves a course of conduct in all respects opposed to that which leads to success in the cosmic struggle for existence, since self-assertion is the essence of the cosmic process, and unmitigated selfassertion is incompatible with social morality. But much as we love and admire our great leader, so recently taken from us, we love nature more, and resent any and all such statements as libels upon her great, calm, loving processes. It is easy to see the apparent grounds for this misconception; but we affirm that it is a misconception, nevertheless, as a careful weighing of the facts in the case will prove, and we venture to assert that Love with its daughter, Goodness, is not only a legitimate product of the process but next to Hunger the most powerful factor in it.

Before proceeding to a consideration of the question in detail, I wish to call attention to certain obvious facts, that I think are hardly estimated at their true value in discussions of this subject. The first is that the emotion of love itself is a fact as firmly attested by experience as any other in the physical world, and hence from a purely naturalistic standpoint is not only entitled to but must be recognized as one of the factors in cosmic progress. In this sense it is as genuine a force in the scheme of

progress as gravitation. The animal or man who permits affection to influence his conduct in the struggle is obeying a law of nature just as truly as the one who is influenced by hunger. Love is everywhere in evidence and actually at work and *must* be reckoned with.

The second is that love and its results being everywhere present not only in the human species, in all ages, but in all the countless forms of life, from the very earliest dawn of intelligence and consciousness, there is no conceivable reason why it should not be regarded as a result and part of the process just as much as intelligence, combativeness, or muscular power,—and the real onus probandi rests upon those who assert that it did not so originate and develop.

As Herbert Spencer pertinently remarks in reply to Huxley, "If the ethical man is not a product of the cosmic process, of what is he a product?" Strictly speaking, the struggle for existence and the naturalist are fully entitled to claim love and morality as their own until "revelation" and the supernaturalist have proved the contrary. And while not only in popular but also in a large and weighty proportion of scientific thought the cosmic struggle is regarded as "inadequate" to account for the affections and morality, yet it must also in all fairness be admitted that from a rational point of view "inadequate" would be an extremely mild form to apply to any of the numerous other attempts to account for them.

The third consideration is that love and selfish-

ness, or, in the language of the day, altruism and egotism, are, instead of utterly antagonistic and destructive to each other as is generally assumed, really complemental and mutually helpful. Both are absolutely essential to progress, and neither could long exist without the assistance of the other. Either of them, if carried or followed to an extreme, will defeat its own ends and prove detrimental to not only the community but to the individual. It may sound paradoxical, but it is nevertheless a fact, that any intelligent and effective egotism must necessarily include a considerable degree of altruism, not only in man but in the beast, the bird, the insect. Unbridled egotism wrecks the "ego" just as surely as it wrongs the "alter."

Probably nothing would give us a more vivid impression of the fundamental and basal character of love than a consideration of the time of its first appearance in the cosmos. For a long time it was commonly assumed in discussions of this question that it was strictly confined to the human species in its purity, and that even here the genuine article was possessed only by the few who had acquired it through the medium of some "gospel" or "revelation."

It was admitted that a good imitation of the emotion was displayed by "the heathen," and even the lower animals, but this was officially declared to be mere "blind instinct," "brute impulse," etc., and of a totally different nature from the supernatural or imported variety. But this position has had to be

abandoned and the dignity and holiness both of our own "fleshly" affections and those of the lower animals admitted. Love was now said to appear when infancy did, or wherever living and breathing young were born which required protection.

But even this line was too narrow, for it obviously excluded some of the most striking instances of the passion; among birds, for instance, in ants, in bees, in spiders; nay, even in crustaceans,—indeed, traces of the golden thread may be followed down almost to the protozoa. In fact, the date of its appearance is as difficult to fix as that of the creation,—with which it is probably coeval.

Broadly speaking there appear to be two classes of influences or forces at work in the universe. These may be roughly described as centrifugal and centripetal, cohesive, separating and individual and social. Both classes are equally necessary and equally inherent. For instance, the natural tendency of all matter is said to be constant movement in a right line, but everywhere that we find it this influence is held in check by an attraction between itself and

Thus gravitation might be figuratively described as a sort of atomic affection. The whole universe is believed to have been formed by this mutual affinity between the particles of its original nebula or firemist, causing them to combine first in rings or bands of different density and coolness, then in rotating spheres, and so on through endless combinations of increasing complexity down to the present day.

other atoms known as gravitation.

The nebular hypothesis is the primitive love-story of the solar universe. The power of combination is the mainspring of progress here as elsewhere.

Physicists tell us that the whole difference between the three states of matter, the gas, the liquid, the solid, consists simply in the closeness of the relations between their molecules.

And the more intimate these become, the greater the possibility of permanent variation and consequent progress. The gases of to-day are practically those of the original fire-mist, the fluids have varied but little since the bounds of gray old ocean were established. The wondrous development that we see about us has occurred almost wholly in and through the firmly coherent solids. Without cohesion no progress is possible.

Nor is this cohesion mere contact under external pressure, mere inert resting of one molecule upon another. Suspend a thread in a saturated solution of any crystalline salt and watch the result. From every part of the liquid tiny particles rush to group themselves around it, until it becomes transformed into a solid pillar consisting of almost every atom of the salt in the vessel. There seems to be a positive clan-feeling between the molecules. And not only is this affinity for each other active, nay, aggressive almost, but it is also purposeful. The column around the thread is not a confused heap of granules but a wall or mosaic of clean-cut, uniform, delicate crystals often of most beautiful shape and hue. More than this, given the salt in solution and the temperature,

and the exact shape of these crystals can be foretold with absolute certainty; the molecules of one salt will invariably rush together and arrange themselves in prisms; of another in needles; of another in delicate and elaborate rosettes or in sparkling diamonds of six, eight, or ten facets and faultless outline. In short, the conviction almost suggests itself that these atoms have not only affection, but its invariable companion, intelligence.

It goes without saying, of course, that this same instinctive impulse of combination is the very essence of the development of those higher forms which we term "alive," even long before consciousness or volition of any sort can be imagined to exist.

If we watch the wonderful and beautiful division of labor among the cells which takes place in even the simplest forms of plant life, must we not almost imagine that some sort of an understanding exists That some sort of blind instinct of between them? devotion or loyalty to the mass accompanies the action of one group of cells in burying themselves in the ground, away from the light, the warmth, the dew, of another in flattening themselves out into leaves, all lungs and stomach, and of another in shrinking down into the woody fibre of the stem or petrifying themselves into its silicious coating? In one sense, the relation is on a purely mercantile basis, each group renounces a part of its birthright in order to render certain services to the plant-republic, which in return supplies it with food, water, air, or protection as the case may be. And yet it is hard to rid

ourselves of the idea that there must be some sort of esprit de corps, some dim sense of solidarity amongst them, at all events, even if we are not permitted to credit them with kindly intentions or with affectionate sentiments, yet it cannot be denied that their actions possess these qualities in a high degree. In the which they are decidedly superior to many professed philanthropists and reformers among their descendants of the present day.

Nor is the service rendered by any means always consistent with the welfare of the individual cell, in many cases it is exactly the reverse and it literally "lays down its life for its friends" and performs its chief function by dying.

We cannot deny them the martyr's death or what is more difficult, the martyr's life, though we may the martyr's crown. The same is true of the cells of the animal organism, including those of our own bodies. A beautiful illustration of apparent devotion is furnished by the white cells of our blood, the leucocytes, whose principal function appears to be a protection of the body against all noxious germs or substances which penetrate its tissues. This they do by hurling themselves upon the intruder, regardless of whether they destroy, or are destroyed by him, and either overwhelm him by their numbers or failing this, imbed him in their dead bodies so that he may be swept out of the system without being able to attack the other tissues. No enemy can enter the fortress save over their lifeless corpses.

And the singular thing about it is that they are in

no way directly connected with the fixed cells of the body or under the control of the central nervous system.

They are a band of free lances ranging up and down the blood channels, who receive from the body their bread and salt, and in return are ready to die in

the last ditch in its defense.

The complete individuals also of most forms of plant-life display a decided tendency to group themselves together in clumps, in patches, and in masses. Nor is this due entirely or even mainly to direct propagation, or peculiarly favorable soil or aspect, but they actually flourish better under certain degrees of mutual pressure. Our grasses and grains, for instance, cannot reach their highest development except in masses. The huge ear and priceless berry of the wheat would be impossible were it not for the support afforded to its slender stalk by its fellows in the golden billows of the wheat-fields.

The towering stature and spire-like erectness of the lordly pine can be attained only shoulder to shoulder with its brethren in the serried ranks of the dense forest. Alone it dare not brave the winds of

heaven to half that height.

Nor is it solely between cells of the same plant or plants of the same species that relations of mutual advantage exist; it has been demonstrated of late that almost all the classes of higher plants depend for their very existence upon the existence of swarms of bacteria in the soil, which change the nitrogen of the soil, of the air, into ammonia and nitrates in which form alone it can be absorbed by the roots of grasses and herbs. Simply destroy the bacteria and molds in any given patch of soil by heating it, and plants will refuse to grow in it. In most cases, of course, this relation is a mere geographical one, an accidental co-existence in the same soil-bed, but in others it is so definite and intimate that a term has been coined to express it—"symbiosis" or "mutualism."

Common clover, for instance, is largely dependent for its nourishment upon the abundance of tiny, apparently parasitic organisms which attach themselves to its rootlets, known as "root-knots," which absorb nitrogen from the air and elaborate it for the use of the plant. Hence its peculiar power, so highly prized by the farmer, of not only not impoverishing but actually enriching the soil in which it grows.

A similar service is rendered by the molds which form upon the roots of oaks and ashes in certain soils.

In the plant-world, at least, there is no antagonism between "the higher life" and the lower; in fact, the former absolutely depends upon the latter. It would, of course, be absurd to claim that any feeling of affection or conscious purpose was present in or prompted by these mutual relations among vegetable cells, but still it seems hard to imagine its occurring with such tremendous frequence and constancy without some blind instinct of combination, some dim sense of solidarity, on the part of one or both groups.

My main object in dwelling upon it is simply to call attention to the fact that combination is as essential and important a law of nature as antagonism, friendly co-operation as hostility.

"Live and let live" is as necessary a part of the struggle for existence as "war to the knife."

That when man loves he is but giving a name and conscious shape to impulses which have existed in the germ since shortly after the earliest appearance of life on the planet. That love is to him as natural and necessary an emotion as hunger.

The first appearance and real birthplace of true love and conscious affection is to be found in the reproduction of the species. Around this process cluster alike its earliest memories and its noblest developments. From its earliest stages there is a curiously altruistic element about it, a subordination of the individual to the race.

The amœba who divides by simple fission is performing an act of immense importance to the race, but of little or no conceivable advantage to himself, unless he may have been driven to it in the first place as the only alternative of stagnation and death. Similarly the hydra, a little higher up in the scale, thrusts out its buds, apparently far more with reference to the colony, than to any advantage of itself.

The process goes on, rising in type and increasing in complexity, through the anemone, the star-fish, the shell-fish, in the same blind instinctive manner, though with a rude dignity about it that separates it from all other vital processes, and it is not until we reach the point where the division of labor takes the majestic and far-reaching step of making two individuals necessary to its performance that we find any trace of conscious emotion or purpose concerned in it.

The appearance of sex, the development of maleness and femaleness was not only the birthplace of affection, the well-spring of all morality, but an enormous economic advantage to the race and an absolute necessity of progress.

In it first we find any conscious longing for or active impulse toward a fellow creature. Though big with great possibilities, it is yet as an impulse to conduct of the narrowest sort and apparently in many respects but little superior to the purely selfish or nutritive appetites. Another touch is needed before it becomes capable of development or of reaching any high or noble pitch.

And this is the appearance of offspring which need

parental care.

The first appearance of reproduction, by fission or division is chiefly a forced solution of the problem of keeping up a sufficient proportion of absorbing surface to a given amount of bulk. Nature's stern ultimatum is, "Divide or die,"—and the amœba divides. But this is found to be a clumsy and expensive process, and an improvement is introduced by which the cell instead of cleaving to its very center simply throws out buds from the surface, the buds become smaller and more numerous and ova are formed, and finally the process is divided between two separate individuals, and the sex is born.

For a long time sex appears to be little more than a mere economic device, a vital "division of labor," on the grounds of economy of expenditure and increase of efficiency. Indeed, this would appear to be its chief rôle not only in the plant-world, but through the whole Invertebrate Sub-kingdom with the exception of one great class, the Insects, and in the three lower classes of the Vertebrates. Yet even here its high character is shown by the wonderful beauty and complexity of the structures developed by it, as the colors and shapes of flowers and the incredibly elaborate mechanisms they possess to insure fertilization by insects; the rich tints and graceful contours of the luscious fruits, the priceless berry of the wheat and grain of the maize, the rainbow lustres of fishes. Even in those classes where it does not reach the level of parental affection, as in the crustaceans, the fishes, the reptiles, it is invariably associated with the highest development of strength and fightingpower in the males and of intelligence in the females, of which they are ever capable. The nocturnal journeyings of earth-worms, the pluck and determination displayed by fishes in their long and perilous annual migrations in search of a spawning place, stemming the fiercest currents, leaping the millweirs, forcing their way up the brooks where the water is scarcely deep enough to cover their backs, all that the next generation may have their start in life under the most favorable circumstances possible, are cases in point. And although the classic statement that "even an oyster may be crossed in love,"

must be regarded as a mere figure of speech without scientific foundation, yet his gastronomic associates, the lobster and the crawfish, are aroused from their usual lethargy to a tremendous pitch of pugnacity and valor by the approach of the pairing season and undertake quite extensive migrations under the same influence, while the females of some of the highest forms of crustaceans appear to exercise even a small amount of maternal care, carrying the ova and newly hatched young on the under surface of their caudal appendages.

The same may be said of the fishes, the reptiles, and the amphibia, even the stupid and sluggish newt or salamander being galvanized into something resembling activity and intelligence by the approach of the breeding-season.

Let parental affection, however, appear, and a striking transformation begins. Intelligence not only of a degree, but of a kind unknown before is born. If this were confined to the mammalia alone, it might be regarded as a mere coincidence, and affection as merely one of the many properties of the higher forms of life; but the fact that this emotion produces identical results not only in a lower class of vertebrates, the birds, but in a class of invertebrate life, the insects, effectually negatives this claim.

Insects are in no way superior to other classes of invertebrates in size, in vigor, or in nutritive power, indeed they are inferior to most of their fellows in these respects, and yet in two qualities alone, affection and intelligence, they reach as it were, at one bound, not only the head of their own sub-kingdom, but also a rank almost equal to that of the very highest forms of vertebrate life. And in nearly every instance this extraordinary intelligence is chiefly displayed in connection with the reproduction of the species.

The chef-d'œuvre of the wasp, the one thing that makes him famous, is his paper-like nest and comb, every angle of which is calculated with mathematical accuracy. But his ingenuity does not stop with the construction of this exquisite hexagonal cell and the safe deposition of the fertilized ovum at the bottom of it. The cell is built not only large enough for the adult larva but also for an abundant supply of food materials for his nourishment during his development. Moreover, the wasp is a carnivorous creature, and a supply of even freshly-killed juicy caterpillars would putrefy long before the larva grows large enough to devour them, so the grubs are caught and instead of being killed are dexterously stung just behind the head, at precisely the required point to strike the chain of nerve-ganglia and paralyze them.

Thus they are incapable of either movement or further development, but will continue to live and hence "keep fresh" until master larva is ready to make use of them. Could human ingenuity go further? A refrigerator-car or can of corned beef is a clumsy device by the side of this.

Bees can boast not only of the triumph of the comb, so exquisitely constructed with a view to a maximum of strength and containing power with a

minimum of material, that not even the most elaborate engineering calculations can improve upon it, and a strip of wax "foundation" an inch wide and four long and weighing a few grains can be expanded into the bulk comb four inches square by two inches thick, containing over a pound of honey, but also of one of the most elaborate and yet elastic social and political organizations that the sun shines upon. A limited monarchy in which the rights of every citizen are firmly upheld.

And all this is directly for the preservation and perpetuation not of the individual but of the race. That other bees who are still in the egg may survive the coming winter, the earlier-born worker-bee literally and actually slaves herself to death, gathering honey, making comb, or elaborating bee-bread. life-time of a worker-bee in the height of the season is often not more than three or four days. At the call of their queen they swarm forth in myriads to leave their comfortable hive and brave all dangers in starting a new colony to raise more broods. Their celebrated weapon, the sting, while of incalculable value for the protection of the community and its stores, is not only valueless but actually fatal to the individual, as death inevitably follows its use. most extraordinary achievement however is the power possessed by them of actually determining the sex or sexlessness of the larva by the food upon which they feed it, thus literally "manufacturing" queens, or workers, and even apparently drones, as the needs of the hive demand. A power which places their intelligence not only on a level with ours, but distinctly above it.

Ever since the days of good King Solomon we have been exhorted to "go to the ant" as a model of industry and foresight, but these are only the smallest of the qualities in which even human beings would do well to take these wonderful insects as a pattern. Not only do they, as the proverb approvingly comments, build houses and store up food against the rigors of winter, but they possess a social organization so elaborate and advanced, that they have actually passed some of the standards, established by anthropologists, for the third stage of savagery or first of barbarism, namely: "The domestication of animals other than the dog." Several species of ants not only capture but literally domesticate a variety of the green plant-lice (aphides), "milking" them by stroking them with their antennæ until they yield their drop of honey-like secretion, building stables for them upon their favorite plants and changing them to fresh pastures from time to time as their needs demand. A regular dairy-farm, only with little green cows in place of the classic red ones. They build houses which rival our modern Chicago "skyscrapers," ten, fifteen, and twenty stories in height, with halls, store-rooms, sleeping-chambers, corridors, warm southern galleries for nurseries, and royal apartments. They go out to war, in serried ranks, under the command of a single leader. They have laws which are rigidly enforced and whose penalties are promptly inflicted. All they lack is speech to render them well nigh our equals. As one of the closest observers of their habits, Krapotkine, asserts: "Mutual aid within the community, self-devotion grown into a habit and very often self-sacrifice for the common welfare are the rule. . . . And if the ant stands at the very top of the whole class of insects for its intellectual capacities; if its courage is only equalled by the most courageous Vertebrates, and if its brain-to use Darwin's words-' is one of the most marvelous atoms of matter in the world, perhaps more so than the brain of man,' is it not due to the fact that mutual aid has entirely taken the place of mutual struggle in the communities of ants?" There is just one function around which all the activities of this wonderful people center, which is alike the motive and the goal of all their efforts, the care of the coming generation. For them the finest and most spacious galleries facing to the south and warmed by the sun are built and reserved, for them the honey-dew of the aphis is collected, for their production and protection the whole elaborate community is organized, for them the battle is fought to the death.

Break open an ant-hill and you will find at once that the first thought of the entire startled community is to save not themselves, but the eggs and larvæ; the warriors rushing bravely forth to discover and attack the enemy, while the nurses, seizing each her charge in her mandibles, with an utter disregard for their own lives, rush wildly hither and thither in search of some place of safety where they may deposit their precious burden. In a wonderfully short space of time every egg has been carried into some of the uninjured galleries; the opening hastily blocked with little pellets of earth, the warriors are recalled, unless they have, much, to your sorrow, succeeded in finding your ankles in the meantime, and the work of the community which was so rudely interrupted goes on once more. The one thing that lifts the ants, the bees, the wasps head and shoulders above all their fellows is the love they bear to their offspring. Wherever in the wide world of organic life love is found, there also are found its devoted servants, courage and intelligence. The higher we rise in the scale, the more prominent does this factor become.

The thing which most distinguishes that living, vocal sunbeam, the bird, in his warm affection, first for his mate, and secondly for his nestlings.

To the first he owes his matchless hues and exquisite shading from the liquid-fire of the humming-bird's throat to the soft silvery sheen of the turtle-dove's breast, or the underwing of the plover. To this also he owes his wonderful gift of song which rises as far above human speech in its power to express emotion as it falls below it in its ability to convey ideas. No one, I think, can listen to the burst of glad-throated melody which greets the sunrise in May, from every copse, without feeling that the soul of the bird comes nearer the soul of man than that of any other of the innumerable forms of life: nay, that in love and worship it rises far above it. And

every shred of color, every line of pencilling, every note of melody owes its being to the graceful rivalries of courtship, in Philistine phrase, to sexual selection. They are of no possible benefit to his nutrition as an individual: on the contrary, they serve both to warn his prey and to render him conspicuous to his enemies. They actually mean fewer butterflies and more breathless chases, but he needs them in his little affaires de cœur, and behold, they are developed and become his chief glory and only claim to distinction.

And with the appearance of the offspring what an immense amount of skill and craft and intelligence must be developed: first there is the building of the nest, a pyramid of Cheops in itself which must accurately match the bark of the old apple tree, in whose fork it is built, like the chaffinch's, or swing from the wind-tossed tip of a bough beyond the reach of the craftiest snake or most active monkey, like the oriole's, or be slung up under the eaves like a swallow's, or woven so that it will float in a freshet like a water-hen's, or stitched on the under side of a leaf, "as the fern seed, invisible," like the hummingbird's or built in the center of a chevaux de frise of thorns like the shrike's. No sooner is this finished and the eggs laid than the period of hatching begins, and what a tremendous developer this is of patience and courage in the female and energy and foraging-skill in the male. With the appearance of the young all the aggressiveness and resources of both parents are strained to the utmost, everything that comes near the nest must be attacked, and fresh food is demanded every hour of the day.

Then there is the training of the little ones to fly and the watchful guarding of their first flutters, the brave attacks of the father upon every foe that approaches, or the skilful feints of the mother as screaming and fluttering with drooping wing and limping gait she lures the foe to pursue her and leave her offspring to escape or hide themselves.

Bird-beauty, bird-music, and bird-intelligence have one common root, the nest. Later on they are used for more extensive combinations: groups, flocks, colonies are formed for migration, for protection, nay even for combined attack and defense.

Little groups of king-birds will attack and fiercely pursue hawks, wagtails will positively persecute sparrow-hawks, even tiny swallows will surround, and by sheer force of numbers and aggressiveness, overwhelm and chase away a falcon, if it dares to come near their nest-colony. A mere "passel o' sparrers" will take a positive delight in making the life of any owl, that they can discover in the daytime, a burden to him. Water-fowl upon the shores of lakes will combine to attack and drive off falcons, ospreys and even the eagle himself. Through mutual aid and mutual affection, "the meek" literally have "inherited the earth."

But it is when we reach the highest class of all, the Mammalia or "breast" animals, that this close relation between affection and progress becomes most striking.

At the very outset of his consideration of this aspect of the struggle for existence Darwin remarks in his clear, simple, almost matter-of-fact style, "The individuals which took the greatest pleasure in society would best escape various dangers; while those who cared least for their comrades and lived solitary would perish in greater numbers." And this thought though sadly overlooked or even shamefully misrepresented by many of his so-called followers, is of late being emphasized as it deserves. One of our highest authorities upon the social life of animals. Krapotkine, declares that: "Life in societies is no exception in the animal world. It is the rule, the law of nature, and it reaches its fullest development with the higher vertebrates. Those species which live solitary or in small families only are relatively few and their numbers are limited. Life in societies enables the feeblest mammals to resist, to protect themselves from the most terrible birds and beasts of prey; it permits longevity; it enables the species to rear its progeny with the least waste of energy and to maintain its numbers, albeit with a very slow birth-rate. . . .

"Therefore while fully admitting that force, swiftness, etc. . . . are qualities making the individual the fittest under certain circumstances, we maintain that under any circumstances sociability is the greatest advantage in the struggle for life. . . . The fittest are thus the most sociable animals, and sociability appears as the chief factor in evolution both directly by securing the well-being of the species while diminishing

the waste of energy, and indirectly by favoring the

growth of intelligence. . . . 1

"Therefore combine, practice mutual aid. That is the surest means of giving to each and to all the greatest safety, the best guarantee of existence and progress—bodily, intellectual, moral. That is what nature teaches us."

The same thought is vigorously advanced by the brilliant biologist, Arthur Thomson, who says: "But animals are social not only because they love one another, but because sociality is justified of her children. The world is the abode of the strong, but it is also the home of the loving."

The attitude of most popular and many scientific writers towards these "higher" qualities of ours is truly singular. Utterly useless or actually injurious to self-advancement, they have come into being somehow by chance and are a sort of dangerous and expensive biological luxury, which man and the higher mammals can afford to indulge in, solely by virtue of their superior strength and intelligence. Social instincts and relations have sprung up, not as a means of waging more successfully the struggle for existence but as a means of escaping from it, and we are gravely warned by some "evolutionist" philosophers that we must not allow our sympathies for our fellows too much sway over our conduct, lest we should "promote the survival of the unfit!" And all the while it is these very sympathies which are both the foundation and mainspring of our present "fitness"

¹ The italics are ours.

and civilization, while love is the very creator of our strength and intelligence, instead of their spoiled darling. In the great group of mammals the same rule holds as in birds and insects, that whatever species or families are solitary and unsocial in habits, form no communities and few or brief family ties and give birth to few offspring at a time and these requiring but little care, are almost invariably either of a low grade of development, stupid and cowardly, like the sloth, the armadillo, the ant-eater, and the mole, or else ferocious, capable of little modification, and of a sometimes keen but markedly limited intelligence, like the cat, the panther, the wolverine, and the otter. If we were to divide the group into three great classes, those who care little for their offspring, or mate for a brief period only, those who are devoted to offspring and mate but indifferent to all others of their species, and those who cherish not only their immediate family but also the members of their pack, flock, or community, we should find almost every species of any notable degree of intelligence in the last class. And while certain members of the second class, such as the great cats and the bears, are as individuals among the most formidable and dangerous of the entire sub-kingdom (although the gorilla, the water-buffalo, and the wild stallion can meet any of them on equal terms), yet they can never become half so numerous in a given area as those of their own family who form packs for mutual assistance, nor do they resist extermination as long. And even the tiger will snarlingly relinquish his kill to the dhole- (wild dog) phalanx, while the huge grizzly has to often give the right of way to the wolf-pack, and the jaguar to the peccary-herd. Fierce and powerful as are the tiger, the panther, and the grizzly bear, they are seldom half such a serious and obstinate obstacle to spread of civilization or so dreaded by settlers in a new country as the far feebler wolf, with his pack-forming power. On the other hand, scarcely a single mammal, excepting the cat, has been found worthy either physically or mentally of domestication by man, which is not social to a high degree.

We are apt, I think, to forget what a vitally important and incessantly acting factor in the survival of all our larger mammals, outside of the pure flesheaters, this mutual aid is. The moment, so to speak, an animal gets big enough to be readibly visible from some distance in the open, it must either confine itself to thickets, swamps, and mountain-ledges, or combine with its fellows for mutual defense. This combining would appear to be associated more closely than with any other single factor with the lengthening of the time required for reaching maturity on the part of the young. Most carnivora are for practical purposes of either escape or defense mature at from six to ten months, while most hoofed animals take from two to five years for full development.

This naturally increases the duration of parental care and the size and complexity of the family, which, aided by the polygamous instincts of the male, becomes the nucleus of a rapidly forming herd.

The larger and more complex the latter becomes, and the greater the intelligence required to maintain concerted action and keep in touch with the entire mass, while under the protection of numbers relieved from the necessity of rapid and frequent flight, the size and vigor of the body steadily increases until the species becomes almost impregnable against the attack of any carnivorous species, save and except the fiercest and most dangerous of all, man, as was the case with the buffalo of our Western plains. The daily and hourly exercise of first, affection, then intelligent sympathy, and finally courageous devotion is absolutely necessary to existence. Even an animal so apparently little gifted in other respects as the cow displays some remarkable qualities in this regard. The hardiest Texan ranger is extremely chary of handling or even alarming a young calf, lest it should "blart" out its danger-cry, for the whole herd goes simply mad with rage at once and will attack anything that comes in their way. Such is the watchful care extended over these little ones that in the spring when they first begin to arrive and, like their scarcely more chubby human counterparts, need to sleep most of their time and are quite incapable of following their mothers over the considerable area which must be covered every day in grazing, regular crèches are established for them on the sunniest slope of the grazing valley, where they are guarded by three or four of the sharpest-horned old Amazons of the herd, while their mothers graze at ease till meal-time comes. One of the prettiest

sights upon the great cattle-ranges is to suddenly come upon a group of ten or a dozen of these little red-and-white breathing puff-balls, fast asleep in the grass, with their vicious-looking guards patrolling near them, the herd grazing in the distance and a couple of hungry covotes gazing wistfully down from the top of the next range of hills, hoping that something may happen to distract the attention of the guards for a minute or two. But the flaw in this bravery and vigilance lies in its occasional inconstancy. In horned cattle fits of rage are apt to alternate with equally furious and unreasoning fits of panic, and though the cow will protect her sucking calf under all circumstances, in the mad stampede many a weanling and yearling falls behind the herd and is pulled down by the hereditary foe. It is to our noblest friend, the horse, that we must turn for the perfection of mutual aid and civic courage.

When the alarm is sounded by the sentinel of the herd, the horses and mares rush not away from the danger but towards one another and rapidly form a compact mob in the center of the valley. The colts and yearlings are pushed into the center while the adults form a firm ring round them, facing outward, so that whether the snarling and disappointed pack of the gray devils of the plains attack the regiment in front, flank, or rear, or all three at once, they find themselves everywhere confronted by an unbroken rank of snapping yellow ivories and dancing iron hoofs, driven with the force of trip-hammers, any attack upon which will only result in a mouthful of

their own teeth or a broken skull. It is the "human wall" of Sempach, the hollow square of Waterloo, in its original form and like them it can defy any foe short of the bullet. Should a mare or colt be surrounded by the wolves before they can join the regiment, the latter moves swiftly but steadily to their assistance led by its war-chief, the oldest and ruling stallion of the herd. He alone takes no part in the formation of the circle, but trots proudly out from it in the direction of the threatened attack and woe betide the wolf who ventures near enough to be overtaken before he can regain the broken ground of the nearest foot-hills. It is short shrift and no quarter for him, and not only the big, gray timber-wolf of our Northern plains, but even the jaguar of the pampas, have been slain in single combat by the warlord of the horse-herd in defense of his mares and colts.

All these faculties are, of course, developed in a state of nature, and perhaps better exemplified in this condition. Indeed it is the training which this mutual co-operation has given, and alone could give, to their intelligence which has rendered them capable of such valuable co-operation with man in his progress. There can be but little question but that the horse transfers or extends to man the sentiments which he originally felt toward the herd, while the dog simply regards man as at least a member and possibly as a sort of deified embodiment of the pack. Hence the touching fidelity and self-sacrificing devotion, of which both these noble friends of ours are capable, the mere mention of which is enough to call up in

most of us the warmest and most grateful recollections. There is no need to multiply instances, poets have sung and philosophers have sounded their praises in all ages, and here the relation between affection and other high qualities is still preserved, for it is almost invariably the most loving who are the most intelligent and the most courageous.

Moreover those animals, or breeds of them, that are kept most constantly upon terms of affectionate intimacy with their older brethren of the human species, are those which are most distinguished for courage, beauty, and intelligence. There is nothing peculiarly favorable to the development of the horse in the climate, soil, or vegetation of Arabia; much indeed that is unfavorable. But here, almost alone in the world, the horse has been made a member of the human family, sheltered under their tents, fed from their dishes, fondled, wept over, nay, even prayed to in times of peril, and the result has been not a spoiled and effeminate plaything, but the noblest joint-product of man and nature—a creature with the swiftness of the falcon, the beauty of the gazelle, and the courage of the lion, who will gallop till he drops, with no other spur than the mere touch of his master's hand. If the wild Bedaween of the desert had never produced anything but the Arab horse, that alone would have earned them the gratitude of the human race. It is simply astonishing to what extent every breed of the horse, which has achieved a reputation outside of its own native province, owes its best qualities to the mixture of his

wonderful blood. Either directly or through his descendant, the English thoroughbred, he has left his mark all over the civilized world. The winner of the Derby or St. Leger, the American trotter, the spirited Barb, the Australian Waler, the plucky and wiry broncho of our western plains, all alike are proud to trace their pedigree back to him, and wherever his blood is found, it still carries with it not only speed, beauty, and endurance, but what ranks almost higher yet, absolute devotion and indomitable courage. Whatever man is called upon to risk his neck, to trust his life to his horse, whether in battle, in the hunting field, or upon the badger-riddled cattle ranges, the Arab blood is his first choice. As a shrewd old Yorkshire horse-dealer once expressed it to the writer. "Your thoroughbred, sir, has always got a leg left, no matter how nasty a place ye gets him into, and he'll save your neck at the risk of his own."

The same is true of the dog, those breeds or individuals which are most distinguished for intelligence and courage being almost invariably those that are kept in or about the house, as trusted members of the family. Dogs which are kept in packs or kennels are usually distinctly inferior in intelligence and generally in courage. One of our most celebrated trainers gave it, as the secret of his success, that he got his dogs to "associate with him just as closely as possible." This is so generally recognized by dog fanciers that there is decided prejudice against "kennel-bred" dogs, who have been reared as it were by

wholesale, usually with a number of others, fed by an attendant, and have had but little opportunity of getting attached to anybody. In fact, fully half of the justly vaunted intelligence of the dog depends upon the intimacy of his association with and affection for some man.

Nor is this interdependence between the civil virtues and intelligence, by any means limited to domestic animals. The wonderful architectural achievements of the beaver have their origin in the closeness of his social ties. The remarkable sagacity of the wild elephant is matched by the firmness of his social organization, while the baboon who is able to use sticks, stones, and thorns as weapons in his warfare or as implements in his food-getting and whose general intelligence is so great, that it is declared by the natives that he knows how to talk, but won't for fear he should be put to work, is equally remarkable for his co-operative powers, moving to the attack or plunder in regularly-organized bands which obey a leader and post sentinels. These latter are not only heeded instantly, when they give the alarm, but several instances are recorded where they have apparently been tried and punished with death for failure to warn the band of danger. When retreating before a victorious enemy, if one of their number is intercepted or captured his comrades will rush to his rescue, or failing this, the leader has been known to return to his assistance single-handed.

And the case is even stronger when we come to the highest species of all. The most striking and influential characteristic of every tribe of the lowest degree of civilization is its Ishmaelitish attitude—its hand against every man, and every man's hand against The thing that makes the Bushman, the Akka, the Tierra del Fuegan a savage and keeps him so, is not his lack of intelligence, for of this he possesses often a larger share than some of his brethren much higher in the scale. It is not the unfavorable nature of his climate or environment, nor the absence of animals suitable for domestication, but it is simply his inability or unwillingness to trust, not merely the members of other tribes but the members of his own tribe, nay, the members of his own family sufficiently to co-operate with them in any way. Indeed, the short-livedness and fickleness of his kindly impulses may even prevent him from keeping and caring for any animal long enough to domesticate it, thus debarring him from taking the first step upward in the social scale. Kipling, in one of those wonderful flashes of insight into the very heart of things, which so often illuminate his pages has epitomized this attitude as that of "the desert where there is always war."

The frightful indifference of the savage to human death and suffering, not merely in respect to his enemies, but also in his own tribe, which leads him to squabble and fight to the death over the merest trifle, to kill the aged in times of scarcity, to systematically practise infanticide, and even to kill all who are seriously wounded after a battle, or who appear unlikely to recover from illness, is by far the most powerful and fatal obstacle to his progress.

In the first place, this terrific waste of life, at every pore, as it were, keeps the tribe small and weak and absolutely prevents that pressure upon each other and upon the means of subsistence which, as we shall show in another chapter, is the chief stimulus to industrial progress. In the second place, individual life is rendered so short and so uncertain, that absolutely all the energies of man are devoted to its mere preservation, with no time to spare for increasing its fulness or comfort. Thirdly, as will be shown in the chapter on Pain all those powerful influences for elevation, known as the natural sciences, botany, chemistry, astronomy, etc., had their origin to a large degree, in what could be broadly termed "medicine" and came into being very largely through that effort to preserve the helpless, protect the weak, and restore the sick, which this unsocial spirit so emphatically antagonizes. It cannot be too strongly insisted upon that almost the whole of our power to protect and increase the efficiency of the well grew out of our cure of the sick. And last but not least, this attitude of distrust and hatred absolutely prevents that co-operation, that division of labor, without which no substantial progress is possible. In so far as he hates, the savage is a savage, and will remain so. Whenever he begins to love he begins his upward progress toward civilization at once.

In the lowest stages even the family tie was so loose as to furnish but little foundation for the formation of even the smallest group which could be united by mutual confidence and affection. Just as soon.

however, as this becomes more stable, a small but wonderfully effective band is formed to serve as a nucleus for further development. The mother of course will always protect and befriend her child, but it is not until the father begins to take an active participation in the process that anything like a permanent group can be formed. So soon as this begins it is obvious that the father who protects his children most vigilantly in times of danger and watches over them most carefully in times of sickness, who shares his last portion with them in famine, will soon collect around him a larger and more effective family group than that of his more indifferent neighbors, and the advantages of "a family of tall sons" are still sung and recognized in every primitive community from our present Western frontier back to the times of Joshua.

The family group which follows out this line of conduct most persistently would reap cumulative beneficial effects with each coming generation. By this time it will have become large enough, not only effectively to protect itself from the smaller groups by which it was surrounded, but also to be regarded by outsiders as a desirable body to become connected with by marriage, or in some other way. This would soon give it a pre-eminence in the tribe to such an extent, that its principle of conduct would become a rule for the majority of its tribal connection, and this again, of course, would result in a still wider spread of mutual confidence and the possibilities of and practise in intelligent co-operation. Thus the living

snow-ball would grow as it rolled, until the principle of co-operation having become instinctive in its members not only as regards all members of the family, of the clan, and the tribe, the same spirit would reach out towards some of its neighboring tribes and a confederation would be formed.

By this time the tribe would have grown in mass and in wealth, to such a degree that division of labor would not only have become possible but absolutely necessary. Animals would have been domesticated, weapons would be made by one man, clothing by another, ornaments by another; some rude knowledge of the medical virtues of plants and mineral earths would have been obtained, cookery would have made some progress, resulting in the possession of pottery and other utensils—and behold, the community is no longer savage, but has reached the next stage, that of barbarism. The same cohesiveness, which has made them strong for defense, has also made them powerful for attack and the conquest of neighboring tribes; or the occupation of new territories can now be attempted. This, by throwing upon them new demands both of climate, of methods of warfare, methods of agriculture, the necessity of overcoming rivers, mountains, swamps, and other natural obstacles, will stimulate the growth of the mechanical arts in every way, and the confederacy will rise rapidly in the scale. But even yet it is necessary that this same tolerant temper continue to be manifested. If its career is merely one of invasion and plunder or of extermination, its spread, though it may be brilliant, will be of but short duration, like that of the Huns and the Turks. But if, however, its treatment of conquered peoples is fair and honorable and they are given something of the rights and privileges which its own members so dearly prize, then the confederacy will rapidly fuse itself into a nation; its progress will not be merely geographical but political, and its tides will swell toward the highest goal of national progress.

Even having reached this stage, no matter how great and powerful the nation may be, so long as it fails to accord to the subjects of other nations the same substantial rights and privileges which it cherishes so zealously for its own citizens, it cannot be regarded, in the full sense of the term, as civilized. Even to-day the most practical and striking division, between the civilized and uncivilized nations of the globe, is made by the test-question as to whether another nation can afford to permit her citizens to be tried anywhere, unreservedly, in its courts of law. Only a few years ago, for instance, this question was being seriously debated by the European powers in regard to Japan. The hope of all of us is, that that day is not far distant when this confidence in and affection for our brother man shall have spread throughout a still wider circle, so that not merely may individuals group themselves into families, families into clans, clans into tribes, tribes into confederations, and confederations into nations, but that the great nations of the world may group themselves together into a vast confederation of humanity, all of whose members shall be both fellow-citizens and brethren. Instead of being a mere episode in the march of civilization, least of all opposed to its dominant factors, affection, with the confidence which is begotten of it alone, has been the very key-note of the process. And while the ties of blood and a pardonable pride of family may perhaps bias my judgment, yet it does seem to me, that the one thing which more than any other has been at the bottom of the wonderful colonizing and empire-forming feats of the Anglo-Saxon, whether of Lesser or Greater England, has been his deep-rooted tendency toward fair, honorable, and even kindly treatment of the weaker races, with whom he has come in contact during his spread. Stern and unsympathetic he has often been, selfish and covetous of land or gold, but it has seldom been that an appeal to the inherent principles of human rights, a plea for justice, has fallen upon his ears unheeded. Although not always loved, he is invariably trusted by all with whom he comes in contact, even those who have most bravely and bitterly fought against him.

CHAPTER VII.

COURAGE THE FIRST VIRTUE.

NOWHERE is the divergence between the Old Gospel and the New more decided than at this point. The attitude of the Synoptics and of "John" is equally unmistakable and deplorable. The "kingdoms of the world and the glory of them" are in the complete possession of Satan, the sole expectation of the believer is that "in this world ye shall have tribulation only." The world "hateth" the Christian, and the "Prince of this world" is his bitterest enemy; hence both improvement and opposition are out of the question, in the very nature of things, and a policy of absolute non-resistance and patient endurance is his only resource. "My kingdom is not of this world. else would my servants fight," "Resist not evil," "Blessed are the meek," "Submit yourselves unto the powers that be," are but a few of the scores of forms, under which the doctrine is reiterated again and again, through all the Gospels.

It has been accepted as a formal article of belief by the Church in almost every age, but fortunately for the race has never been lived up to by any of her Western branches; indeed only a few small and eccentric sects, like the Quakers and the Mennonites,

have even attempted to reduce it to practise. And vet its influence has been most disastrous, for it has in every age had the double effect of casting a paralyzing blight over the aggressive activities of the noblest and purest minds, and serving as an excuse for indolent and cowardly submission to injustice, or toleration of abuses, by the baser sort of natures. In its scheme of the virtues there is absolutely no place for courage, except in the passive forms of endurance, patience under persecutions, continuing "steadfast unto the end." Christ repeatedly compares himself to a shepherd and his followers to his sheep, his lambs, his flock. And as Paul Carus aptly remarks in his "Homilies of Science," "This comparison was sufficient to give a crown of glory to the sheep. Christians forget that similes remain similes; that they do not cover the truth in all respects but at one or two points only. And thus it happened that the weakness of the sheep, its simplicity, nay, its very stupidity became an ideal of moral goodness and Christian virtue. Humanity, Christian and non-Christian, is under the influence of the sheep allegory still. . . . Let us beware of the ethics of ovine morality." Paul's celebrated list of the fruits of the spirit" contains nothing approaching courage except "long-suffering." Consequently Christianity was an almost complete failure as a factor in the world's progress, until it was grafted upon races whose irresistible vigor and sturdy combativeness made a fighting religion out of it, in spite of its doctrines. Indeed, for everything in it which

makes for liberty, justice, and progress it is vastly more indebted to the Teuton and the Celt, than they to it. When the stern old Puritan wanted a fighting text, he was driven perforce to the otherwise despised Old Testament with its pathetically irrelevant "smitings of Amalek," and hewings of Agag in pieces. And this omission accounts for a large share of the alleged negativeness and passivity, or as it has sometimes been expressed, the "feminineness" of Christianity, its fatal substitution first of being, then of believing, for doing. The sin which drove the hermit into the desert and the monk into the shades of the cloister was cowardice, and the selfishness born of it. And this again left nothing in the body of all its teaching to prevent an abject and cowardly submission to the flat of an irresponsible and often irrational tyrant, for fear of unpleasant consequences in this life and the next, being made the chief motive of human action; as in much of our modern evangelicism even to-day.

Of the passive sort of courage there was a splendid abundance among its adherents, as the superb record of its "noble army of martyrs," witnesses in letters of fire and blood upon every page of its history. But of the active sort, in the way of aggressive, reformative action of any description, there was a deplorable lack until it had been assimilated and supplemented by the sturdy Teuton and Slav soul, in Luther, Wyelif, Huss, and their spiritual ancestors and descendants. And while no one would be further from wishing in any way to detract from the richly deserved glory of

the martyr's crown, yet in strict justice, it must be reluctantly admitted that sadly too much of the endurance and fortitude displayed, was from fear of worse consequences and more lasting punishment in the future life, should recantation be made, than from pure love of the truth or unwillingness to be false to one's own convictions. We repeatedly meet with the statement by the martyr himself, as a final argument of the highest and most unanswerable nature, that he dared not refuse to do or say such and such a thing, however perilous, or deny such and such a vital tenet, lest he endanger the salvation of his own soul thereby. And with a pathetic perversion of the mystic words of the Master," it is better to enter into life maimed, than having both hands to be cast into hell," sufferers have actually sustained themselves and each other in the torments of the stake with the reminder of how much preferable these brief agonies are to ages of eternal torture. From Paul to George Fox, one of the chief burdens of the meditations of the saints has ever been, "Woe is unto me if I preach not the Gospel!" All honor to their dauntless bravery, upon whatever it was based, whether from or in spite of their creed, but more deaths upon the field of battle, fighting against oppression, and fewer at the stake would have been more to the advantage of humanity at large. It was magnificent, but it wasn't progress, and there is little reason to lament the decay of the martyr spirit. Nor can it be said that their protest took this form from sheer lack of strength or numbers to make any other hopeful, for

at a very early date the heads of the primitive church were able to say in a petition to the Emperor Julian asking for liberty of belief and practise, that if it were not for their being forbidden to take up the sword, they could seriously endanger his throne, so large a proportion of his subjects did they form.

In fact if we look into the matter more closely we shall find that not only was active courage, of any sort, not adequately recognized by the four Gospels, but that they positively discouraged such frames of mind in the tremendous stress which they laid upon faith and submission. So that gradually any sort of self-assertion or initiative came to be regarded as actually sinful. And it needs only to be mentioned what a calamity to human welfare this accursed, intentional cowardice of the good has been and is. It has robbed humanity of the better half of the influence of its best and noblest elements and has done more to give reality to the conception of the poet, "Right forever on the scaffold, wrong forever on the throne," than all other influences put together. alone is chiefly responsible for the fact, that in every age, a mere handful of bold, unscrupulous rascals have succeeded in terrorizing and even oppressing and abusing half a nation of well-meaning but timid and irresolute good people. Nor can we flatter ourselves that we have escaped its influence yet, for it is to-day, to mention one field alone, the curse of modern politics, in which we have the astounding and humiliating spectacle of entire municipalities, states, nay, even the nation of honorable, intelligent citizens, not merely ruled but robbed and insulted by a mere corporal's guard of the most contemptible curs and cads imaginable, known as "bosses," whose sole source of power is their unparalleled "nerve" and activity, plus the unspeakable cowardice and indolence of the "better classes."

As to the real value of courage, active courage, that of the soldier rather than of the martyr, too much ean hardly be said, and yet very little is needed. It would be conceded at once as one of the absolutely indispensable conditions of progress. Willingness to risk the untried, to run the gauntlet of danger, for the sake of possible advantage, to imperil safety for the chance of improvement, is a factor which is always presupposed in the accomplishment of any upward step. And seldom is it lacking "under Nature." Although primarily a self-regarding virtue, it is in its ultimate results and often directly, a race-regarding one also, and any individual's first duty to himself and to his kind is to be brave. He may get through life decently and even honorably lacking any other one virtue, but without this, never. No other virtue is of real effect without it. The chief value, both objective and subjective, of love lies in the bravery which it develops in behalf or defense of its object. The supreme test and criterion of any virtue is whether it develops courage or not. Love must express itself in deeds of devotion involving risk of injury or loss, "faith" by "works" of the same character, patience by fortitude under trial. short, it comes nearer to being the one element, according to whose presence and degree we call an action "virtuous," the one great criterion of morality, than any other quality or grace. It is no mere coincidence that the primitive meaning of "virtue" is "bravery," which again is by further analysis that which distinguishes "a man" (virtus-vir). Neither nature nor man, neither Church nor State, biology or morals has any use for the coward. Conversely our chief criterion in judging of the nature and degree of a crime or vice, is the degree to which courage is absent from it. The essence of cruelty, for instance, lies not so much in the infliction of suffering, for that may be absolutely necessary and blameless, but in its infliction under such circumstances, that there is no balancing risk of possible equivalent suffering on the part of the inflictor, as in the case of women and children, or of unarmed or prostrate foemen. One of the weightiest considerations in determining the murderous or justifiable character of a homicide is the amount of risk run by the aggressor, as to the strength, weapons, and warning of his opponent; in short, the amount of cowardice displayed by him.

While the essence and only ascertainable "sin" of the commonest of offenses, lying, is its cowardice, the desire to gain an advantage, inflict an injury, which we dare not effect by open means, or to escape a punishment or avoid a loss which we haven't the courage to face squarely or submit to. In fact, there is scarcely a crime or vice into which it does not enter as an important element.

And the instinctive respect and admiration for

courage which we find everywhere, fully corroborates our view of its supreme value, and importance. It is not merely respected because it makes its possessor formidable, but it provokes a spontaneous and irresistible respect and even love for its own sake, which is utterly unparalleled by any other virtue or grace except beauty. We do homage and reverence to bravery in a man upon the same sort of irresistible impulse as we worship beauty and purity in a woman. It is one of the great passwords of nature. One touch of it unites all conditions, all beliefs, and all ages in an instinctive throb of sympathy. How a brave deed stirs us in spite of ourselves, whether in friend or foe, black or white, man or beast! Kipling has well voiced this universal sympathy in his stirring refrain:

"For there is neither East nor West,
Border nor breed nor birth,
When two strong men stand face to face,
Though they come from the ends of the earth."

It has been the never-failing theme of song and story through all the ages from the "dark wrath of Achilles" and the "Arma virumque cano" to the Charge of the Light Brigade.

Courage has no need to sue for a place in the list of virtnes of any religious code. It has a religion of its own, whose sacred books are the whole heroic literature of the world, and whose worshipers include the entire human family. In our heart of hearts we feel and know it to be the supreme virtue. Not even love

takes precedence of it, for this without courage would be as dead as "faith without works." To dare to be true to ourselves, to our highest conviction, no matter what comes of it—this is our crowning glory. Nothing has ever struck a deeper chord of response in every true, manly soul, than Henley's lyric:

"Out of the dark that covers me Black as the pit from pole to pole, I thank whatever gods may be For my unconquerable soul."

Courage, sheer, dauntless, inexhaustible, was the supreme glory of Calvary, the one thing which all true hearts have ever worshiped and will ever worship as divine. And the more so as they regard Jesus of Nazareth as man rather than God. Rightly has the Church ever insisted upon the supreme importance of the death of Christ. Without it his life had made no lasting impression upon the heart of the world. The profound simplicity of his moral precepts, the spotless purity of his life, the sweetness and gentleness of his nature, would have won the admiration and respect of the student, the philosopher; but it was the striking combination with all these graces of a high-souled courage, which any iron-gloved fightingman might have envied, a courage which would not fight but scorned to flee, that has compelled the love and reverence of the entire Western world. Sooner than surrender one iota of his convictions, sooner than delay a moment longer the proclaiming of that reign of love, justice, and peace which was literally 142

a "kingdom of heaven" he deliberately dared and unflinchingly sufferred a death of shame and torture. All risk of which might have been completely avoided by ceasing to preach, or by an hour's midnight flight beyond Jordan. But from his fearless, sensitive soul "this cup could not pass" in any such fashion. And to the spotless courage of his love the whole world bows in reverence, and shall bow as long as humanity endures.

Wherefore the Church, being vindictive and cowardly, slew him, as she has done his memory scores of times since, and is doing to-day. For obvious reasons, she has never approved of minds of this type, who cannot be driven even by the certainty of future damnation, and besides burning and massacring all such, whenever she dared, she has ostentatiously thrust forward into the front rank of the virtues the more ladylike graces of love, faith, and meekness. Hence the necessity felt by men, in all ages, of having a code of their own as to courage, honor, justice, etc., outside of the standards of the Church.

And while this code has generally tacitly accepted the stigma placed upon it, of being built upon simply "carnal pride," and "worldly ambition," it has usually been equal and often superior to the ecclesiastical, and deserves formal recognition as a moral source and sanction. In fact, the one-sided "gospel of love" needs to be supplemented by the gospel of courage. Love as a motive and the Golden Rule as a principle of action are of the highest value in all

cases in which they apply, i. e., in man's relations to his fellow-men. But in the wide range of his relations to the great forces and movements of the universe, between him and the gods, or the fates, or the times, they simply have no bearing. But there is one principle which is always to be relied upon, even here,—one beacon whose light never falters, even in the wildest storm, one rock to which a man can cling through all the fury of the elements though it be with elenched teeth and bleeding hands, and that is the courage that is in him.

Never has a deeper reaching, truer precept of human conduct been laid down than in Kipling's wondrous refrain:

"Whatever comes
Or does not come,
We must not be afraid."

This and this only will carry a man through the blackest night and most furious war of the elements. It may not be much "consolation," but it is all there is, and it does remain as a living principle of action and a reality when everything else has become an empty form of words. So long as a man is true to this faith, all is well; let him be false to it, and neither Sinai nor Mecca nor Calvary can save him. If there be an "unpardonable sin," a "sin against the Holy Ghost which shall not be forgiven," it is cowardice.

CHAPTER VIII.

THE STRENGTH OF BEAUTY.

IF there be anything in the universe which is universally regarded as weak, fragile, and incapable of protecting itself, it is beauty. Beauty is the wing of the butterfly, the petal of the flower, which shrivels at a touch or a breath, and can only be preserved by packing in down or covering with a glass case; how, then, can it be said to have any connection with "strength?" Moreover, it is essentially transitory, evanescent, here to-day, gone to-morrow, like the bloom upon the peach, or the blush of the rose, and what strength can there be without stability? Nay, so superficial and so fleeting is it that we are gravely warned against it by moralists of all creeds as something positively deceitful, a snare and a delusion to those who permit themselves to gaze upon it with pleasure. In short, nothing could be more universally and unanimously discredited officially, and yet -and yet-it drags everybody and everything at its chariot wheels, including the moralist himself.

By a strange inconsistency we decry it, and yet we desire it above all things. Which is genuine and well founded, our instinctive attraction to it, or our distrust of it? The former by all means, the latter

is but a survival of the priestly distrust of everything in nature. From a naturalistic standpoint we do not hesitate to assert that beauty is one of the strongest and holiest influences in the world. It is nature's stamp of approval, her certificate of strength, of wholesomeness, and of purity. Whenever an object or organism reaches a certain degree of perfection,

beauty inevitably results.

That beauty is a mark and sign of strength and vigor, needs but little illustration or defense. Of all that family of giants, the great elemental forces, the storm, the flood, the frost-king, midnight with its terrors, the avalanche, the forest fire, none can for a moment compare in strength with the sweet golden sunlight, the loveliest and the strongest thing in the world. And it is a singular coincidence that that metal which was first prized solely on account of its golden hue, wearing the colors of the sun-god, as it was believed, has since been proved by the universal experience of the race, to be the toughest and most indestructible of them all, not only the most beautiful but one of the most useful and most valuable of the metals.

Next to the glamour of the sunshine, the most charming, the most grateful thing to the eye of man is the sweet green of the grass, as it robes the hillsides, and carpets the meadows, or gems the lawn. Nothing could appear more fragile, more exquisite than its host of tiny spears, rippling before every breeze, and shriveling at the touch of the frost. "To-day it is-to-morrow it is east into the oven,"

and yet its march is as irresistible as that of an army with banners—and its lifetime longer than that of the granite rocks. It pushes itself everywhere that a patch of soil, the thickness of paper, is to be found, and tiny tho' it is, it slowly but surely strangles the giant weeds one after the other: the nettle, the burdock, the tare, nay,—even the thorn and the young oak or maple. Gentlest and loveliest of the herbs of the field, it is also the most irresistible, while without it the human race could not exist a single generation.

Literally "All flesh is grass," in a far wider sense than the one intended by the psalmist.

In the animal kingdom illustrations of this relationship abound. Among the fishes, for instance, any artistic eye can at once pick out in an aquarium the active, vigorous, courageous fishes, those that will fight to the death, "game" as the angler emphatically calls them, simply by the sheen of their scales, and the graceful, willowy curves of their outlines.

Take the silvery, crimson-spangled trout, the glittering salmon, the steel-barred mackerel, and the gorgeous muskallonge, and contrast them with the yellow cat-fish, the clumsy carp, the slimy eel and the flabby cod, and comment is unnecessary; no need to put them on the end of a line to see which is the most vigorous.

Walk out into the open country and watch our feathered cousins as they flit or swoop about on their various errands and see if the swiftest and strongest will not pick themselves out by beauty either of color or form. There goes into that flowering shrub one of

those winged gems, a humming-bird, looking like a flying green electric spark with a feathered dynamo attached. A drop of pure beauty, and yet no steamengine of ten times his bulk could begin to do his work, and even the lordly eagle would be utterly incapable of keeping himself suspended in his fashion the livelong day. Compare the iris-hued neck and vivid colors of the swift-flying pigeon and ringdove with the dull colors and pudgy forms of the short-flying hedge-birds, the sparrow, the robin, the wren.

What a difference between the bright colors and graceful lines of the sparrow-hawk and the somber tints and shapeless mass of the screech-owl, between

the superb eagle and the disgusting vulture.

Among quadrupeds the rule still holds. The accepted emblems of strength, of ferocity, of fleetness are the horse, the tiger, the deer, and they are all three the most striking types of beauty which can well be found. On the other hand, the recognized types of feebleness, of stupidity, and of slowness are the sheep, the ass, the sloth-bear, and here again the eye alone would promptly distinguish between the two groups. They look just what they are. Even in our own species, the superiority from a purely artistic standpoint of the Zulu over the Hottentot, the Arab over the Negro, the Anglo-Saxon over the Tasmanian is as marked as from a physical and an intellectual one.

In fact, in the bird or animal world, beauty must be strong and fleet to defend itself against, or escape from, the attention which it inevitably attracts and

the desire which it excites.

The second thing that beauty stands for in nature's picture-writing is health and wholesomeness. Ruskin in a most brilliant passage has asserted the holiness of color, declaring it is a sign of sweetness and purity wherever found. And the Fifth Gospel emphatically supports his contention. The difference in significance between the clear, deep, sparkling blue of the cloudless sky with its promise of warmth and sunlight, of soft zephyrs and gentle dews, and that of the black, jagged storm-cloud or the dull, leaden pall which heralds the pitiless November rain is noticed by the merest child.

Take a handful of wet clay from the ruts of a country road in winter, and could anything be more unattractive, more depressing, more hopelessly useless? And yet, fuse that clay again and again in the crucible, each time rejecting the dross, subject it to high pressure and keep on refining until an absolutely pure, silicate of aluminium is reached, with every crystal of typical shape, and behold, instead of the muddy lump a clear, sparkling, blue gem of almost diamond hardness and value—the sapphire. Just as soon as absolute purity is reached, its "hall-mark" beauty appears, and with it hardness and value. Take a lump of dull black, grimy coal, and simply refine it to its purest possible form, and behold, the diamond with its dazzling rays. Cover the fresh, green, wholesome grasses of the river-bottom by the muddy waters of the June freshet and you have in their place a reeking coat of slime, poisoning the whole air with its malarial vapors, and as offensive to both eye and nostril in its decay as it was attractive in its bloom. Let loose a bevy of children in a half-wild garden copse and they will come back with their little arms and chubby fists filled with roses and lilies, and stained with strawberries, leaving untouched with almost unerring instinct the nettles, the night-shades, and the toadstools.

The vast majority of edible and wholesome fruits are bright and attractive in coloring while the poisonous berries and fungi are usually dull and pale, if not actually repulsive in hue.

Nine-tenths of the bright-colored berries and fruits of our hedge-rows and copses are either edible or harmless; popular superstition to the contrary notwithstanding. Even in those families of plants which have poisonous members the color-line is the line of safety. Take, for instance, the Solanum family, and we have, on the one hand, the crimson globe of the tomato and the coral berries of scarlet solanum, both harmless and refreshing-and on the other hand, the dullpurple berries of the deadly nightshade with their leaden murderous hue, and the sickly, sallow, greenish-white of the poisonous potato-apple. Even in the tropics it is comparatively seldom that the traveler is lured to his destruction by the brilliant and seductive colors of strange fruits, although the general impression given by romantic literature is that the colors are there mainly for that special purpose. To such an extent has this theological prejudice been carried that a species was practically invented for the purpose of supporting it, and marvelous accounts are

gravely related by the early Jesuit missionaries of a so-called "Upas tree," with gorgeously attractive vellow and crimson fruit and shining, green leavesbut so intensely poisonous that not only was the mere taste of its fascinating fruit rapidly fatal, but even the odor of the tree itself, so that it was dangerous to sleep or even lie down under its shade. It is needless to say that while every region which it was declared to inhabit has been thoroughly explored, no such tree as the Upas or anything resembling it has ever been discovered by botanists, and yet this precious parable has been so industriously preached from the pulpit as a moral lesson upon the "deceitfulness of beauty," that the name of this imaginary tree has become a household word and its Borgia-like reputation has done much to encourage, if not actually to cause that distrust of beauty which is so firmly rooted in the popular mind.

In the animal kingdom the same rule holds, for while great beauty is often associated with ferocity, yet this latter is only occasional, and the habitual murderers, the professional assassins and liers-in-wait, like the alligator, the rattlesnake, the puff-adder, and the shark, bear the brand of Cain on every inch of their surface—in their dull, muddy, blotchy colors, uncouth or hideous shapes, and general repulsiveness of appearance.

Further than this the physiologist and the biologist unite in asserting the sweeping dietum "No life without color"! In the plant world the universal emerald coloring-substance, chlorophyll, is not only

the beauty but the very life-essence of the tissues. It is the powerful wizard through whose spells alone can the sun-god be conjured up to furnish the energy which we term "vital" and pile granule upon protoplasmic granule and cell upon cell. Life is simply embodied sunlight and must be beautiful like its source. The life-essence of the animal organism is ruby-red and its presence or absence is a well-known sign of health or of disease. We speak familiarly of "the ruddy hue of health" and the pale and sickly east of delicacy or disease. The ashy cheek of the consumptive, the muddy, earthy hue of the skin in kidney disease or cancer, the sallow, saffron tints of jaundice, the sickly green of anemia, speak for themselves to any eye that is not color-blind. The coloring of the healthy skin, hair, and eye is fresh, warm, and vivid; the tints of disease of every sort, of gangrene, of ulceration, of suffocation, the hues of death and decomposition, are dull, cold, and ghastly. Filth and famine, pestilence and decay, are all alike, either colorless or repulsive in hue. "The pestilence that walketh in darkness" is in its appropriate environment.

Browning goes not a whit too far when he declares:

"If you get beauty and naught else beside, You get about the best thing God invents."

Beauty is God's own trade-mark, and they that bear it not in their foreheads, be they cowled inquisitor or filthy fakir, colorless nun, or sexless and shapeless monk, sadly-sober Puritan or harlequin Salvationist, haggard and sallow-cheeked Mammon-worshiper or flat-chested and bespectacled apostle of "Culture," are to that extent none of His. And yet not a few of His avowed children hold it a thing to be rigidly avoided in their dress, persons, and even surroundings. "Beauty is deceitful and favor is vain" is their cry. This ascetic denial of the holiness of beauty has led to as sad excesses as even its licentious deification in the Attic decadence.

So far we have been mainly considering beauty of color, as an index; but when we come to regard beauty of form, its significance is at once even more obvious and striking. The chief element in beauty of outline is symmetry, and symmetry simply means balance, equipoise, efficiency, and generally either speed or strength. The second important element is the curve, and the curve essentially denotes elasticity, movement, vigor.

A thoroughbred race-horse can almost invariably be picked out of a mob of ordinary horses, simply by the long and graceful curves of his neck, loin, and quarters, and the general beauty and symmetry of his figure. That beauty of form is usually associated with great speed, strength, or intelligence, and generally with all three among the lower animals, will be readily admitted, but that the same rule holds true in our own species, even in these over-civilized days, will be equally promptly doubted, if not denied. And yet I venture to assert that a careful study of the elements which make for beauty in the human

body as a whole and in its various parts, will amply prove this position.

Take the highest form of beauty of which our bodies are capable, the grace of carriage, of bearing, the poetry of motion, and it essentially consists of and depends upon the rippling, springy vigor of muscle, combined with the broad, deep chest of good lung-power, the thin flanks of endurance, the wide hips and well-rounded thighs of weight-carrying form, the straight back held in place by the powerful bowstring of loin-muscles. The woman who possesses the exquisite charm of a graceful bearing, the man who "carries himself well," will be found in nine cases out of ten to be possessed of distinctly greater strength, speed, or endurance than their less attractive sisters and brothers of equal weight, age, and training. We sometimes imagine that the tedious "setting-up drill" of all systems of military training is mainly for the purpose of giving the lines of the regiment a uniformly erect appearance upon parade, chiefly a matter of display, but this is far from the truth. On the contrary, it is insisted upon so invariably because the experience of countless generations has shown that the elements which make up an erect, "soldierly" bearing are the very ones which indicate the development of the highest possible degree of vigor, of speed, and endurance.

The same will be found true of the various regions and parts of the body. We will begin with a region where the standards are supposed to be entirely at variance, the waist-line, whose flowing curves from

arm-pit to hip are rightly regarded as forming the chief beauty of the trunk-outline. Fashion and popular taste demand simply a rapid inward slope to as small a waist as possible, regardless of all other elements of the curve, which breaks abruptly below into a clumsy, shelf-like projection. Physiology and hygiene denounce this as unhealthy and crippling. Beauty and health appear to be at loggerheads here. But it is only with a false ideal of beauty that there is any conflict. Call in the artist, the anatomist to decide the dispute, and he will instantly side with the physiologist. The ideas of "beauty" of the fashion-plate, the modiste, and Mrs. Grundy are often widely different from those of the artist, the architect, the naturalist, and it is with the latter only that we are concerned. We may well paraphrase Madame Roland and exclaim: "Oh Beauty, what crimes are committed in thy name!" In the vast majority of these conflicts between beauty and common sense the fault lies in a false ideal of beauty. The ideal waist of the artist is that of the Venus de Milo, and every line of it fulfils to perfection the demands of the hygienist for the highest lung-power combined with ease and vigor of movement.

Another similar instance of conflict between grace and efficiency is that between the popular and hygienic ideals of a beautiful foot. These differ widely indeed. The popular demand in a feminine foot is that it shall be a narrow-pointed, elongated body, curved, or, more accurately, humped into a nearly horseshoe-shaped arch, the pillars of which are

within a few inches of each other and consist of the compressed tips of the inner toes and a high, narrow heel brought forward almost directly under the center of gravity. Its functions as an organ of support and locomotion are ruthlessly disregarded, and instead of a series of long, low, graceful arches it is distorted into the resemblance of a link of sausage pointed at one end, or a banana in convulsions.

The physician, the skilled pedestrian denounce it as deformed, useless, painful, and almost disabled, and again the artist cordially unites in their attack and demands the very same outlines that they do.

The plan of the healthy, natural foot is an exquisite combination of arches, one long and low from the heel to the balls of the toes, the other short and high crossing this at right angles a little in front of the ankle joint. These are composed mainly of a number of wedge-shaped bones, but there is little that is "bony" or rigid about them, as their form is mainly preserved by the tension of three muscles of the leg, one of whose tendons runs bowstring-fashion from pillar to pillar, while the other two attach themselves to both the upper and under surface of their keystones in a most ingenious manner, if we may use such a term with becoming reverence. Thus the weight of the body is naturally supported upon the intersection of two graceful, yielding, living suspension arches hung upon elastic cables of muscle, which by their expansion and contraction give a beautiful, springy elasticity to the gait. But in order to do this they must, like all other springs, expand, so that the foot ought to become markedly both longer and wider when weight is placed upon it. For this change in form the modern "pretty" shoe makes absolutely no adequate provision, and not only this, but by throwing a ridiculous peg-shaped heel far forward, to give an appearance of shortness to the foot, the longitudinal arch is completely broken, the weight thrown directly upon the sensitive instep, and the center of gravity of the whole body disturbed. The elasticity of the gait is destroyed, just as if a block of wood had been wedged between the flanges of a carriage-spring.

The physiologist demands a long, low, gently arching slope from heel to toes, with a broad, graceful, fan-like expansion across the ball of the foot, and this is precisely the form which has been immortalized by Du Maurier in "les beaux pieds de Trilby." Mechanically the human foot is one of the most exquisitely adjusted, effective, and enduring instruments in the world, it will run down and tire out any hoof, pad, or paw that moves. Artistically for beauty of outline, harmony of curves, dimples and grace of movement it is equally unsurpassed. Here again beauty and strength go hand in hand, and fashionable deformity and feebleness.

The beauty of finely-moulded shoulders and rounded arms and tapering waist is dependent not upon the form of the bones nor even upon the amount of adipose or fatty tissue—mere plumpness is not beauty, but upon the live contour and rippling grace of muscle.

So much so is this the case, that it is probable that our décolleté form of evening dress has in spite of the denunciations heaped upon it by both the moralist and the medical faculty been a most powerful influence in elevating the standard of vigor and improving the physique of the women of our better classes.

As for beauty of complexion, although universally decried as only "skin deep," in its natural and only truly attractive form, it forms one of the best and most reliable indices of health and vigor. It may be imitated, but no paints, cosmetics, or local "treatments" of any sort can possibly reproduce the rich, warm, vivid depth of coloring, the translucent, creamy whiteness, and the velvety gloss of the surface, which is as absolutely dependent upon pure blood and springy muscle as a red June rose is upon its vigorous stem and roots in a fertile soil. A fine complexion instead of a mere surface-finish is the exquisite blossom of health and purity throughout the entire body and literally "goes to bone," as its counterpart, "ugliness," is proverbially declared to do. An artificial complexion usually deceives nobody but its wearer.

In that important realm of decorative art, dress, the coincidence between beauty and healthfulness is no less striking. From the Greek chiton and the Spanish mantilla to the graceful Persian divided skirt and mantle which the celebrated Worth kept hanging upon the walls of his studio as his ideal of the beautiful in feminine costume—the lines of artis-

tic beauty and of hygienic utility coincide almost absolutely.

The corset, the long skirt with its street-cleaning attachment, the crippling multiplicity of petticoats, and the ridiculous bustle are offenses alike against the canons of art and the rules of health.

So far we have been for the most part combating popular impressions, but we now come to a sense in which beauty is even proverbially strong, and that is in its influence. It has been a most potent factor in our development, and is yet in our daily life even in these Philistine days.

In all ages its power for good and for evil has formed one of the principal themes of song and story.

It was no mere accidental coincidence that made the "fatal beauty" of Helen the mainspring of the movement of the grandest epic poem of the ages; nor simply a figure of speech which described the beauty of Paris as causing discord upon Olympus itself.

From Venus and Here to Madame de Pompadour and Ninon de l'Enclos, from Cleopatra to Mary Queen of Scots, the power of beauty has swayed not only minds of men, but the destinies of nations.

The sweet face of the Madonna has been one of the most potent and purest influences in the sway of Christianity, and the saintly features of Beatrice inspired the majestic vision of Dante.

And strange as it may seem in anything so fleeting, so proverbially evanescent, there is a genuine physical basis for all this metaphor and poetry, and the sway of beauty is most powerful not in camp and court, but in the field, in the cottage, in the home. From the lowest to the highest forms of animal life, nay, through the larger part of the plant-world as well, we find it exercising its sway.

Naturalists had long been puzzled to account for the wonderful beauty and wealth of color and elaborateness of markings displayed by all sorts of living forms from the pansy to the peacock.

It was popularly assumed, with a self-conceit that was amusing in its proportions and naïveté, that they were placed there for our especial benefit and sole enjoyment, and their presence was actually made one of the principal props of the old "argument from design."

Even Darwin in his earlier investigations was at a loss to account for their presence, but later, their true meaning dawned upon him, and he declared them to be instead of merely provisions for our own selfish enjoyment, means of progress second only in power to natural selection. Without them, nearly one-half of the vantage gained by vigor, agility, or intelligence would be lost, and in many cases the organism would soon become extinct. In plants, for instance, the vivid tints and gorgeous markings of their petals are signals to attract the insects whose visit is often absolutely necessary to their fertilization. The silvery scales, the ruby fins, and the superb lusters in all colors of the rainbow, in fishes, are for the purpose of charming and attracting the opposite sex.

The velvety plumage, the wonderful shadings and

markings and the matchless song of birds—alike the wonder, the joy, and the despair of the artist, the poet, the musician—are simply aids to courtship, as is proved by their presence for the most part only in the mating-season, and exercise a profound influence upon the development of the species.

The royal coat of the leopard, the majestic antlers of the monarch of the glen, the splendid stripes of the zebra, the tossing mane of the war-horse that "clothes his neck with thunder," not merely delight the eye, but form a prominent part of that wonderful engine of progress, sexual selection.

In our own species nature's masterpiece in colors, in outlines, and expression—the human face divine, owes its very existence to the power of this instinct in us for beauty. Her next most wonderful feat—the ivory whiteness and satin-like suppleness of the human skin can be traced solely to this same cause, as can also the rippling splendor of that "glory of woman,"—her hair. No possible explanation can be given for the substitution of any one of these for our original short, warm, hairy coating on grounds of utility, they are a pure outgrowth of our love of the beautiful.

"Beauty only skin-deep" indeed! it has entered into the very blood, bone, and marrow of the race for countless generations. With its advent hand-in-hand with love, the stern law of the "survival of the fittest" loses half its terrors, for a new element is introduced into the problem of "fitness," a new world is opened up for selection. It has swayed and soft-

ened not only the hearts of men, but the great elemental forces and relentless laws of nature herself. And has it lost any of its primeval power to-day? Not a whit. It sweeps everything before it as almost no other influence can. Even in this mercenary age the value of beauty as a dower is second to none. That a lovely woman should have the talent and wealth of half a province at her feet is as natural and excites no more surprise than that the discovery of gold should be followed by a wild rush of eagereyed prospectors. It is exchangeable for a large equivalent in cash in any mart, and that is apotheosis in the nineteenth century, the sincerest tribute it can pay it. To its possession the renowned and omnipresent "woman in the case" owes all her power. It still gives to-day to the individual possessing it, as it has always done in past ages and species, a greater power of control over his or her influence upon the generation to follow, than any other single attribute with which they could be endowed.

As to the value and safety of beauty as a guide and incentive, there will be found wide difference of opinion. The Puritan, and his name is legion, when this question is under discussion, denounces it as absolutely untrustworthy and misleading, one of the cunning snares of the Evil One; the philosopher and the man of the world alike, while admitting its desirability, regard it as too feeble and evanescent a thing to be permitted to seriously influence conduct. And upon this point all would agree that any desire or effort to attain personal beauty would not only be

unprofitable but positively unbecoming. And yet it is just as legitimate and far more wholesome to desire to be beautiful as it is to desire to be rich, or intellectual, or famous. Indeed, we have no hesitation in declaring that whatever may be the "chief duty of man," the "chief duty of woman" is to be beautiful. Not only in mind and character, but also in face and form, in voice and in dress. And I am glad to say woman has always proved faithful to her mission.

By her unswerving devotion to her God-given instinct, in the face of indifference, nay, of ridicule and denunciation, she has builded better than she knew, and I am convinced that not a little of the superior purity of woman's moral nature is due to her devotion to beauty. Woman's love of beauty has done well-nigh as much for the world as man's love of liberty. Both have led to excesses, but these have been mainly due to false ideas of their true nature, and in the overwhelming mass of their influence they take rank among the purest and most ennobling impulses that stir the human bosom. To be beautiful is just as legitimate and elevating an ambition as to be brave, to be strong, to be pure, and its attainment will usually include all four.

The good, the true, the beautiful, are not synonymous terms, but a sincere and intelligent pursuit of either will almost invariably be found to include both the others in its scope. The love of beauty is as holy as any other religious impulse. Contrast it for a moment with the love of riches, which, legitimate enough in moderation, is so easily changed into that

ruthless greed of gain, that selfish disregard for the rights of others, and that degrading tendency to measure all human hope and achievements by their net pecuniary results, which is the curse of the present century. Compare it for a moment with those other qualities which are usually rated so far above it in proverbial philosophy: with prudence, with economy, with thrift, and that whole brood of so-called small virtues which so easily hatch into vices and make the niggard, the coward, the miser. Nay, even place it by the side of that overwhelming ambition for culture, which is now sweeping like a prairie fire through the popular mind, darkening the heavens with its smoke clouds, deafening the ear with its roar, and threatening the male of the species with ignominious destruction, or at best a mere toleration of his existence. But which too often leaves behind it—ashes, in the form of a thin layer of dislocated and undigested information and an irritating smoke-haze of polite omniscience and superficial eleverness.

Beauty is not only far better and safer as a goal than any of these but it belongs in an entirely different class. Our instinct for it is no mere selfish personal greed, but one of the great trinity of religious aspirations. Although ranking lower in importance than the instinct for the Good and the instinct for the True, it is nevertheless equally holy and equally essential to the perfect development of character. Even alone it will lead to some wonderfully perfect results.

The master impulse in the Greek nature was the worship of the beautiful. Beauty, and physical beauty at that, was the summum bonum of the entire race, and yet in its pursuit they developed not only a sculpture and an architecture which has been the despair of the world ever since, but a physique which for vigor and athleticism has scarcely yet been equaled, a philosophy marvelous both in its depth and its brilliancy, a literature which will live as long as the world endures, and a system of political thought which is still the model of our highest institutions.

As an incentive this third grace has one decided advantage over the other two, which is that it is instantly recognized and appreciated by all. The good may often appear hard and stern, the true is to many cold and even cruel, but upon the face of beauty rests ever, as it were, the smile of divine approval which kindles an instant response in every heart. Show man beauty as a part of the goal of his upward struggle and you arouse his enthusiasm at once. No need to urge him to love beauty, he couldn't help it if he tried.

Beauty is no mere accident of nature, no mere surface-play of the elements, it is a part of the very constitution of the universe. If anything be immanent, be divine, it is. Wherever we turn its smiling face welcomes us. Whether it be in the rosy mist that ushers in the pearly dawn, the golden cataract of the noon-day sunshine, or the flaming hosts of sunset in their crimson and purple and velvet. In the soft

and rippling tide of green which floods the landscape every spring, the luxuriant shade and dancing, waving abundance of meadows and corn-field in the golden glow of summer or the crimson and purple flames of the autumn woodlands and vineyards, filling the air with the haze of their soft, blue smoke. It smiles at us from the rosy tints, the sparkling eyes and the dimpled curves of infancy, it glows in the eye, it mantles in the cheek, it is revealed in the splendid bearing of that crown and glory of the universe, woman, it glistens in the silvery locks, the delicate grace and gentle dignity of ripe old age.

CHAPTER IX.

THE BENEFITS OF OVER-POPULATION.

I am well aware that to many this title will appear paradoxical, if not absurd, that I shall seem to stand much in the position of the author of the historic chapter on "Snakes in Iceland," which he was compelled to open with the words "There are no snakes in Iceland."

Not only this, but I am uncomfortably aware that I am flying in the very teeth of the great bulk of orthodox, be-spectacled, political economists, both ancient and modern, in disparaging the ferocity of their favorite bugbear, over-population, which is always just about to devour us, but somehow never does. I shall not venture to entirely "denige of" his existence, but will limit myself to the assertion that the ruthless pressure exercised by the units of the race upon each other and upon the means of subsistence, whenever considerable masses of them are confined to any comparatively limited space, has been not only not detrimental, but positively beneficial in its effects and will probably always continue to be so up to the highest densities of population.

The Malthusian view makes man his own deadliest enemy and the Black Hole of Calcutta the ultimate goal of the race unless something promptly be done to take matters out of poor old nature's incompetent hands.

To what extent does a backward glance over the history of the race appear to support this view, that the mutual struggle for existence of man against man is in any way deleterious or likely to become so? According to this view the nations which have had plenty of "elbow room" should have made the earliest start and the most substantial progress in civilization. But where do we actually find the earliest recognizable dawn of progress beginning? Not on the broad and fertile plains of Southern Siberia or Western Turkestan, the reputed cradle of our race, not in the rich champaign of Hungary nor yet the rolling prairies of our own Mississippi valley, or the boundless pampas of South America, but in a little, narrow, ribbon-shaped river-valley, the only streak of light in what is even to this day, the Dark Continent, hopelessly hemmed in on either hand by stern mountain range and pitiless desert.

A little band of nomads, having lost their way, and wandering instinctively but aimlessly westward, have crossed the desert and suddenly from the crest of the mountain barrier catch sight of the silvery waters of the Nile. They rush in and take possession, and in a few dozen generations they and their cattle have multiplied until the valley is brimful of herds and pasturage suddenly becomes scarce. The soil is needed to feed men instead of cattle, and agriculture springs up, rude and careless at first, but rapidly be-

coming more finished and complete as the food-demand upon each acre increases, while out of disputes as to values and boundaries, civil law, mathematics and systems of mensuration slowly evolve, men begin to eluster together for mutual benefit and protection and "citification" or, as we now call it, civilization, begins.

Still the great tide of human life rises steadily, rolls back from the desert-mountain barrier on either hand and surges down the narrow channel, until the whole valley from the Delta to the cataracts is throbbing with confined energy. The tension rises a little higher and the floods bursts its banks, to roll in tide after tide of conquest over the major part of the then known world, until its force is completely exhausted. When wars abroad and luxury and disease at home had thinned the ranks and broken the constitution of her people, Egypt fell, but not until she had indelibly stamped herself upon the history of the race and established a claim upon its gratitude which needs but to be mentioned to be admitted.

The Nile valley under the Pharaohs held over seven millions of people, who were so terribly "over-crowded" that they lived in splendor and conquered, where two and a half millions of their descendants to-day grovel in poverty and slavery.

Turning to the next beacon-light of history we find it flaring above a small group of rocky islets in the northeastern corner of the Mediterranean. Places with just enough fertile soil in patches to start the race to multiplying and then force them back upon one another or into the sea. Again the pressure steadily

rises and civilization and philosophy with it, until an overflow occurs, after which the race steadily deteriorates. So long as "Greek met Greek" in insular warfare and lived and fought and died crowded within his little city walls, of which he was proud to consider himself a "brick," Greek heroism, thought and vigor grew with ever-increasing intensity, whetted like iron against iron, but from the moment that the flower of Hellenic chivalry, spurred on by the lust of conquest, began to spread itself over the whole of Asia and send back its oriental spoils and vices to corrupt the cowards and sluggards who remained at home, the doom of Greece was sealed.

The star of empire moves but a short distance westward when it again comes to a stand over a narrow mountainous peninsula with a frowning barrier of well-nigh impassable Alps across its landward base, swarming with people who in beak and appetite bore a not wholly fanciful resemblance to the eagles on their standards. A nation of hardy peasants and sturdy burghers, driven in upon one another by natural barriers and hostile neighbors, they developed under the pressure a bravery, endurance and sagacity which made them the masters of the known world and the lawmakers of all time.

So long as Rome could breed men enough to fill the ranks of her brave legions, all went well, but the demand at length became too heavy for the supply, her best and bravest were steadily drafted into the provinces and their places at home filled up by slaves and weaklings, wealth and luxury added their deadly influence, and the grand old sturdy race was literally extinct long before the Gothic invasion reached the walls of the imperial city. With a population of a million and a half crowded within her narrow walls, Rome ruled the world; with two hundred thousand in the same space, she groveled under the cowardly heel of Austria scarce twenty-five years ago.

Thus far it would hardly seem as if even very high degrees of mutual pressure upon each other and upon the means of subsistence were in any way detrimental to a race; in fact, I should make bold to assert that such a pressure was one of the chief moving factors of progress and well-nigh the key-note of civilization. But we live in the present, and the question now is, "Does the condition of affairs about us to-day practically bear out this view?"

If we were to arrange the states and nations of the different continents to-day in the order of the density of their population, we should find that we had arranged them, roughly speaking, very nearly in the order of the influence and degree of civilization, or at least that the groups at the extremes of the scale would be practically identical in both cases.

For instance, in Europe we have at the head of the list, Holland and Belgium with a density of 424, and Great Britain with one of 300 to the square mile, and at the foot Turkey with a density of 70 and Russia with 43. In Asia it ranges from China, with 530 to the square mile, to Siberia with 2 and Turkestan with less than $1\frac{1}{2}$.

In America, from the United States with 17 to the

"section," to the Argentine Republic with 3. This is the state of the case between nations of the same form of civilization; while of course one of the most obvious differences between barbarous and civilized nations lies in the density of their populations.

"Why, certainly," I hear some one exclaim, "savage races are thinly scattered because they're savages, without tools or skill, while civilized peoples are thickly settled because their ancestors happened to stumble on to improved methods of cultivation and labor-saving devices, and thus increased the food value of the soil."

But is this a logical statement of the case? I think it would be more nearly correct to say that savage toilers are savage because they are thinly dispersed, and civilized nations civilized because of their den-

sity.

Take, for instance, the corner-stone of the last century's boasted industrial and scientific progress, the invention of the steam-engine. Countless generations of savages had sat and watched the white wreaths rise from seething pot and bubbling kettle without once even dreaming of making them their slaves. For why? They had no use for them. The "noble savage" has little or no property that he cannot throw over his shoulder or slip into his pouch and march off with. What cares he for transportation facilities? The beasts and herbs of the forest, with a few rude-tipped arrows, supply his every need; he wants no labor-saving machinery, he feels no need of rapid transit so long as his enemies are no fleeter of foot than he

is; in short, the demand for the invention must precede the invention itself. And that demand comes only from the pressure of keen and even savage competition with his fellow-men. It is highly probable that even the invention of the horse as a means of locomotion was due to the stern necessity laid upon some short-legged or short-winded savage of getting out of the dangerous vicinity of some fleeter-footed and fiercer neighbor as promptly as possible; while it is almost certain that the club, with its host of lineal descendants, the hoe, the hammer, the sword, etc., originally owed its introduction to the desperate ingenuity of some much-persecuted anthropoid as a means of neutralizing the longer arms and sharper teeth of his fellows.

But, it will be said, has not much of this boasted civilization and progress in denser communities been the gain of the favored few at the expense of the many; have they not been powerful by virtue of their numbers and at the sacrifice of the health and welfare of a large proportion of their constituent members? I answer, most emphatically, No! that the individual has gained in equal ratio with the community. The average Englishman of to-day is healthier, stronger, longer-lived, and in every way happier and better off than the noblest savage to be found anywhere on the globe, and so far from the individual being at less value and importance as numbers increase, by a curious paradox the value of human life is invariably lowest where it is scarcest. Infanticide is a virtue and murder a fine art among savage tribes of a few hundred souls, while the mere thought of either sends a thrill of horror through nations of as many millions. So far as statistics can be obtained, the death rate among savages is higher than in any civilized community, and of late years in many rural districts than in the great cities. In other words, the struggle with one's fellow-men is far less destructive and much more rapidly improving in its effects than the struggle with the elements of nature.

The government and leadership of the world to-day in every field of thought and activity is, as it always has been, a government by and leadership of cities. Strike out those great seething, reeking masses of struggling humanity, which we ever and anon hear denounced as the plague-spots of our body politic, as cancers upon our national life, and history would have to be re-written from the beginning. Fancy, if you can, a Greece without Athens, a Roman Empire without Rome, France without Paris, an England without London.

The vice, poverty, and misery of our great cities strike us forcibly only because we see the crime and incompetency of a province focussed and concentrated into a few dozen streets and squares, while the mildness of the struggle for existence permits the persistence of forms which would long ago have been eliminated anywhere else.

So much for the past and present, but it is for the future, says some one, that we are most anxiously concerned. It may be quite true that in the past, with the aid of wars, famine, and pestilences on the

one hand, and the resources of science, growth of prudence, emigration, etc., on the other, population has never yet gone beyond certain comparatively harmless limits of density, but can we be at all sure that such will always be the case, with arbitration threatening to take the place of war, famines abolished, pestilence under control, sanitary science and benevolence preserving even the weak and almost worthless forms and the bulk of the untilled garden-spots of the earth occupied?

Let us see how this problem was regarded by our ancestors a century ago. .It is scarcely a hundred vears since a little volume entitled "Essays on Popuation," by one Malthus, appeared in England, the burden of which was that increase of population was the chief cause of misery and crime, and must, therefore, be checked by every lawful means in our power. Its views were almost universally accepted by the econ omists of the day. In spite of this fact this social "root of all evil" continued to flourish, and to-day stands ready to answer the charge. Since the time of Malthus the population of England, declared already far too dense, has nearly quadrupled, with what disastrous effects will be seen when we come to examine the economic statistics of the latter half of thatperiod, from 1830 to 1880. During this half century the population has doubled, and by all the canons of Malthusianism, misery should have done the same, but for some inexplicable reason other things have got ahead of it; wages, for instance, have increased on an average 70 per cent., while the hours of toil

per diem have diminished 20 per cent.; every penny of the increased wage will buy a larger quantity of bread, cheese, bacon, groceries, or clothing, for prices are from 20 to 60 per cent. lower. Even "death and taxes" have been robbed of some of their terrors, for the rate of the former has shrunk from 28 to 18 per 1,000, and the latter almost in the same proportion. "Misery" would seem to be another name for wealth and comfort, for capital has increased four times as fast as population, and is well distributed, for the amount deposited in savings banks has increased 500 per cent., and the number of depositors 1,000 per cent., while the consumption of tea, coffce, sugar, cheese and bacon per capita has increased 400 per cent.

Turning to the moral aspect of affairs, we find that the proportion of pauperism has diminished 50 per cent., of penal sentences 75 per cent., and prisoners of all sorts 55 per cent. In short the quadrupling of a population already so dense that the highest dictum of the day was that "increase" meant "crime and misery," has been attended not only by no deterioration but by an elevation and improvement which would have seemed simply incredible to contemporary thought.

Have we any more reason to dread the future than Malthus had?

Let us take a brief review of our situation and resources, always bearing in mind that there may be, very probably are, influences as yet hidden in the bosom of the future, as beneficent to and as unsuspected by us as steam and electricity were by him. In the first place, although we are utterly unable to fix any limit of density beyond which population cannot safely increase, yet taking that density which to-day coincides with the highest type of national and individual development, viz., about 300 to the square mile, as at least a safe standard, we find that by far the largest part of even that fraction of the world's surface which we regard as civilized, scarcely averages one-third of that density, this vast country of ours, for instance, having less than one fifteenth of its possible population.

In the second place, while very large areas of the available soil have been colonized within the past century and the westward-bound Caucasian is already at sword's points with the eastward-drifting Mongolian, yet the colonies have scarcely been more than surveyed with a view to settlement, and we still have nearly 3,000,000 square miles of virgin soil in Brazil, the same in Australia, 2,000,000 in Siberia, half a million in the Argentine Republic, and hundreds of other smaller tracts, every mile of which may yet be made to carry its 300 Anglo-Saxons or Teutons, while as an almost bottomless cesspool for the absorption of our surplus population the "Dark Continent" lies invitingly open.

Farther than this, I think no one can gaze upon the magnificent relics and remains of any of the ancient civilizations without asking himself the question why its desert plains and valleys may not again swarm with myriads of human beings who shall play a noble part in history, instead of being only haunted by jackals, bats, Bedaween and Fellaheen. Darwin in his "Descent of Man" at the close expresses his conviction that from a biologic point of view it seems inevitable that the civilized, progressive races of the world to-day will steadily but surely conquer, exterminate, and replace the savage, decadent ones. That day will surely come sooner or later, and the signs of the times are even now beginning to point dimly towards it. Egypt is already practically an English province; Russia and Britain are steadily preparing to divide Persia and Turkestan between them. Turkey, with Syria, and possibly Arabia, is slowly declining into the jaws of the "dogs of Christians," while France and Italy are quietly strengthening their grip upon the whole north coast of Africa. The partition of Africa and even of China is the most exciting "game of nations" to-day.

The present degraded inhabitants of these lands will become hewers of wood and drawers of water for the superior race until such time as soap, spirituous liquors, and the influences of advanced civilization generally shall have either elevated or exterminated them. In fact it is highly probable that all savage, barbarous, or degenerate tribes inhabiting the temperature-belt where our Aryan race can thrive will ultimately go the way of the red men of the prairies.

But what avails all this, even with the possibility of balloons, flying-machines, the utilization of the ocean tides as huge generators of electricity, the absorption of nitrogen as food from the air without the intervention of plant-life and other faintlyheralded future achievements of science? What can this do more than temporarily postpone that "dies iræ" when the aeronaut from Venus will find himself confronted by the legend "Standing-room only on this Globe," backed by a howling mob of cannibals, since, as everybody knows, "Population tends to increase in geometrical, and the means of subsistence in arithmetical, ratio?"

It is really most interesting to note how widely this great axiom has been recognized; it seems to have fairly compelled acceptance by its own inherent force and beauty, it has such a conclusive, satisfying sound about it and supplies such an apt explanation of every conceivable economic situation, however puzzling, in fact its only drawback is—that it isn't true. Neither logic nor experience will harmonize with it.

In the first place, inasmuch as the means of subsistence in question consist wholly of certain families of our distant relatives, the edible seeds, plants, and fruits and the animals which feed upon them, every one of which has a natural rate of increase from ten to a thousand times as great as our own, there ought to be but little fear of our being able to make the supply of them keep pace with our demand.

In the second place, all the records at our disposal show that in any given case the means of subsistence have not only not fallen short of but gone far ahead of the increase of population, for instance, while the population of the United States increased 20 per cent. in a given period, the produce increased 50 per cent.,

and the wealth of England has multiplied eight times while her population has only doubled in the last half century. As an eloquent friend of mine has epigrammatically expressed it, "Every single mouth born into this world brings with it two hands."

In fact man is not only the highest of mammals but the most valuable and useful to his own species, none the less so that he cannot actually be used for food. The intrinsic value to the race of the noble horse is far greater than that of the cow or sheep, and although no check is ever placed on his increase by slaughter, we have no fear of being "overpopulated" by him or of his becoming a drug on the market, and why should we of his infinitely nobler, more perfect, and more useful brother, man. The whole history of the development of the race has been and is simply the working up of the dust of the earth into the highly-specialized form which we term "man." And the supply of dust is still practically unlimited.

Had the alchemists of the middle ages, who wasted lives and fortunes in tircless search after the "Philosopher's Stone," but looked a little deeper, they would have found it within themselves, the beautiful bloodred ruby, the flower of life, turning everything it touches not into dull, yellow lumps of metal but into that most beautiful and most precious of all treasures,

the living, glowing "human form divine."

CHAPTER X.

THE DUTY AND GLORY OF REPRODUCTION AND THE ECONOMICS OF PROSTITUTION.

REPRODUCTION is Heaven's first law. The first commandment in Genesis is, "Be fruitful, and multiply," and is of more importance than all the other Ten put together.

It has also the advantage of being much more generally observed, and that without much assistance from either Church or State: indeed, in spite of them both at times.

The usual attitude of systems of morality and religion towards this magnificent sexual impulse is characteristic. The principal burden of their childish song is, "Thou shalt not!" They have generally little to say in approval, but much in reprobation of a process whose dignity, beauty, and magnificent perfection they seem utterly incapable of appreciating.

Religion, of course, has frequently gone to the opposite extreme, and instead of denouncing the sexual impulse as wholly sinful and degrading, at best a concession to poor, weak, erring human nature, which may be tolerated because it cannot be actually suppressed, has actually deified it as in the unspeakable Phallic rites of antiquity from which one of our now

most sacred modern religious symbols is more than suspected of being derived.

However, between the Pauline attitude and its offspring, the Black Plague of monasticism, on the one hand, and the Phallic worship with its Bacchanalian rites upon the other, there is really little to choose either as to rationality or as to actual moral results.

Because, forsooth, this impulse is a hard thing to control, it is to be condemned entirely, and scarcely a religion or a philosophy can be found which has not advised, nay, even ordered its absolute repression, and held up celibacy as the ideal state. Here, as elsewhere, morality is far too exclusively engaged in shrieking—" Don't!!"

Fortunately, however, its counsels, commands, and threats have about as much effect upon the mighty sweep of this holy impulse as Dame Partington's broom had upon the tide of the Atlantic. And because it dares to defy their petty authority and disregard their edicts, priest and philosopher alike proclaim it an outlaw and a war at extermination is set on foot. This soon collapses, and they decide to tolerate it. As a last stab, they unite in stigmatizing it as a low, "animal" appetite, and that alone was enough to damn it for centuries. But the latter term carries no condemnation with it nowadays. On the contrary, the fact of an instinct being shared by the lower animals is good presumptive proof that it is of great benefit and value.

We have reason to thank God that the sexual in-

stinct, one of the noblest, holiest, and most elevating that stirs our bosoms, is an "animal" one, and consequently far older and stronger than we are. It is backed by the life of all the ages and throbs with all the pulses of nature.

Its worst, and I had almost said its only, perversions are human and the results of "reason" and convention.

But this is not the only ban under which this wonderful faculty of ours is laid. Not only is its exercise to be barely tolerated as a concession to weak, sinful human nature, but its very existence is to be ignored as completely as possible, and an imitation instinct known as "modesty" has been invented and developed for that special purpose. Its principal function is to deny the existence of the very sentiment which called it into being. That it is a virtue of the first water, all sorts and conditions of men unite in testifying, but it has one peculiarity so singular as to provoke mention. It begins just where innocence ceases. The first thing that our first parents did in Eden after they had fallen was to discover that they were naked and make unto themselves aprons of fig leaves. Between these two influences our grand sexual functions have gradually come to be regarded as positively disgraceful in themselves, and the parts concerned in them as something to be absolutely ashamed of. Even in scientific nomenclature they are styled the "pudenda," things "to be ashamed of." As for the sexual appetite, the most important and overmastering impulse which moves

the race, instead of its excesses alone being reprobated, it has been so indiscriminately condemned that its mere presence is regarded as sinful. Is this a natural, healthy, rational attitude? No, nor a moral one either. This feeling alone produces the very excesses it was intended to check.

And what is the real rank and dignity of this despised and berated function? The most important, the highest, the holiest. Listen to that brilliant champion of evangelicism, Drummond in his fascinating attempt to convince the Apaches of science that they are or ought to be orthodox Christians if they only knew their own province a little more accurately, and could take a broader view of its relations (in which he comes perilously near succeeding in a way he little intended). In the light of the Gospel according to Darwin he declares that "Sympathy, affection, fidelity, sacrifice, indeed all those noble traits included under the term altruism, spring from the reproductive instinct." Instead of being subversive of all morality it is the very foundation-stone of it. With its feeblest and blindest flutterings 'altruism, the regard for others, is born.'

Unselfishness, sacrifice, is no recent development due to "revelation," but goes back to the Ameba itself. From fission to parturition, reproduction is self-sacrifice. And from the results of the process, from the care and nurture of "these little ones," have grown every atom of our morality, from earth-buried foundation-stone to heaven-soaring pinnacle.

In the light of the fifth Gospel we are just begin-

ning to see the eternal truth of the saying of the first Gospel, "Suffer little children to come unto me for of such (ave and from such) is the Kingdom of Heaven." True manhood, true womanhood, in the highest sense, is impossible without reproduction; while as for love, sympathy, philanthropy, sense of duty, it has simply created them. "The stone which the builders rejected is indeed become the head of the corner." Even the much-lamented power of the sexual instinct is simply proof of the overwhelming importance and value of the function to the race, and the man or woman who can suppress it entirely is less than human rather than more, and will surely become inhuman sooner or later. The first duty of man is to perpetuate the species. The race has the first mortgage on him, and has had ever since he was a seaweed.

If marriage is a failure it is because the race is, and the "Caucasian" is "played out." Our whole social, ecclesiastic, and political organization centers round this institution as nucleus. Civilization rises from the family, through the clan, the tribe, the state to the nation. "Charity," in the true sense of love of one's neighbor, literally "begins at home," and gradually broadens to include the tribe, the nation, the human race in its scope. Indeed the family, the home, need but to be mentioned to be accorded the rank of the great and only true civilizing, humanizing, spiritualizing influences, and any nation which begins to weary of their control is marked for destruction. Neglect of, or escape from, their obligations is

ruinous to all concerned. We all lament the sad lack of home-training so obvious in the children of to-day, but we forget that the lack of training suffered by the American parents of to-day on account of the scarcity of children is equally hurtful. This is the age of untrained parents, and they need training as much as children. The training of children works both ways, like mercy "it blesses him who gives as he who takes," and no man's or woman's education is more than half finished without it. Infancy, as Emerson has said, is indeed "a perpetual Messiahship."

And yet we constantly hear this magnificent sexual instinct of ours shrieked at and berated as if fornication, adultery, prostitution, and rape, were its chief and commonest results. Truly, "The evil that men do lives after them, the good is oft interred with their bones." The instinct, like all other natural ones, is at least a hundred times as powerful for good as for evil.

Let us consider now for a moment the attitude of etiquette and morals—too often interchangeable terms—towards the sexual function in the light of the importance of the latter. There is only one word to describe it, it is simply *idiotic*.

In the first place they attempt and assume to absolutely taboo the whole subject after the fashion of that other bird of equally brilliant plumage and gifted intellect, the ostrich. Not only the sexual organs themselves, but even the whole of the body which is covered by the clothing under which they are hidden is forbidden to be mentioned or even referred to in

"polite" society. According to its canons the entire body from the neck to the tips of the toes is a sexual organ. The origin of this lascivious refinement is obvious, for the mention of the regions which happen to be merely geographically adjacent to the forbidden parts and which no pure-minded or well-bred person would dream of associating with them, such as the chest, the abdomen, the legs, is as severely censured as that of the parts themselves. To such an insane pitch is this "nasty-niceness," as Aunt Tabitha calls it, carried, that we have probably all heard reference to the "limb" of a piano, or the "limbs" of a pair of dividers.

While there is some doubt as to the true nature of much which passes for personal modesty, there is none whatever in regard to this society variety. It is a reticence born originally of a diseased imagination or a guilty conscience, discreditable to the individual displaying it and disgraceful to the society which exacts it. Instead of being, as it mincingly affects to be, the very pink of refinement, it is the essence of vulgarity. "Honi soit qui mal y pense," as the chivalrous King Edward said when he picked up the garter dropped by one of the ladies of his court.

When we come to the absolute ignorance of their most important function which this taboo entails upon many of our boys and girls, the case becomes a most serious one. How many of our boys have the true meaning, uses, and dignity of the sexual organs delicately, but plainly, explained to them before the age of puberty by their fathers? or how many of our

girls by their mothers? I fear scarcely ten per cent. The first knowledge most of them have of this wonderful subject is from the filthy lips of some vulgar servant or prurient older schoolmate. Is it any wonder that, driven by natural curiosity and the powerful impulses of awakening sexual consciousness, and ashamed to inquire of those who ought to be their natural instructors, they resort, in an ignorance as pitiable as it is deplorable, to experiments upon themselves, upon one another, nay—even upon the lower animals. Truly, ignorance is the very mother of vice.

But the most fatal result of this extraordinary attitude of both morals and etiquette is the extent to which the sacred obligation of exercising the reproductive function is destroyed. Our young men and young women of the "better classes" calmly debate the question as "to marry or not to marry." To be capable of such hesitation is a sign, not of self-control, but of degeneracy. After the alliance has been duly arranged for and formed, then the question is to be discussed whether it shall be permitted to result in anything; and if so, after how long delay and how many or, more correctly, how few of them. And from these two sources spring the head-waters of the reeking stream of Prostitution. Its current is swelled mainly by the men whose incomes or positions are not regarded as "suitable" to marry on, and those who having married "can't afford" to have children or "don't want to be bothered" with them. The man or woman who, for any such reason, absolutely refuses to assist in continuing the species has committed the unpardonable sin, and is henceforth fit for nothing but conversion into fertilizer. And nature will attend to the conversion with unerring certainty and comparative promptness if not interfered with. Marriage under these circumstances is little better than legalized concubinage. Indeed, the arrival at this decision is but Nature's forester's mark upon the trunk which is beginning to rot at its core and all her axemen well understand and obey its significance. It is her seal to the death warrant of the race and also of the individual.

Even that modified form of interference with her orders which consists in markedly limiting the number of children, is almost sure to result in serious injury to both individuals concerned and to the community as well. In the first place it is a fruitful cause of prostitution. Many a man is practically driven to the brothel by his own wife and many another deliberately resorts to it from a cowardly and criminally selfish desire to shirk the responsibilities of manhood. Such a man ought to be branded like any other eunuch. In the second place it is easily the chief cause of abortionism, one of the most prevalent and deadly sins of the present day, whose evil results, both physical and moral, are rapidly coming to rival those of prostitution itself. Thirdly, it rears the children who are permitted to appear, in an oligarchy or aristocracy instead of a democracy, and thus deprives them of one of the most valuable parts of their education in hardiness, self-reliance, and

self-control. Children who are less than three in a family are nearly always "spoiled."

In short, limiting the size of families has ever been and still is the chief and most potent factor in the decay of nations and the fall of eivilization.

It is literally a "sin against the Holy Ghost," for it is the thwarting and denying of our deepest and holiest instinct by filthy, huckster-like, Mammon worship, a veritable making of our "Father's house, a house of merchandise." And like such sin "it shall not be forgiven." Every nation in which it had notably prevailed has either stagnated or decayed. The grand old eagle-eyed, bull-chested Roman breed was literally extinct from its ravages centuries before the Empire fell. The stinking stagnation of China and India is largely due to it in the form of infanticide.

And to-day we can study the process in the yet living subject, in our sister republic, renowned alike for the small size of her families, the brilliancy and healthfulness of her prostitutes, the commercialization of her women, both those in marriage and those in the streets, the strict economy and thriftiness of her lower classes, even in respect to manhood and feminine honor, the filthy pessimism of her literature, and the excess of her death-rate over her birth-rate.

The latest and most extraordinary development from the theory of the sinfulness of sex, is that which is, in these latter days, brayed into our ears from every "suffragist" platform. That child-bearing, instead of a factor in woman's development, is absolutely a hindrance to her higher education, a clog upon her freedom and a mortal enemy of "culture." In fact, as a "club-woman" tersely expressed it to a friend of mine a few months, ago "Only fools bear children." There is only one thing which need be said in regard to this delusion and that is, that it has its uses. It prevents the continuation of the breed. Neither the "emancipated" woman at one end of the scale nor the prostitute at the other, propagate their kind, and society has reason to be thankful in both cases.

Where then is the excuse for this attitude of hostility toward the sexual impulses? Their excesses only. Only one of these is now to be considered, but it is generally regarded as the most serious. It certainly is prevalent enough. It has existed from the beginnings of history, nay of society itself; it appears in every race above savagery, in every clime, under every religion and form of government. It has the universality of an institution of nature. It has formed for itself a distinct class or caste in every society; it has its tutelar divinity in every temple, its patron saint in every hagiology. It can even boast of an odor of sanctity. It has formed part of the ritual of most religions, and has been more or less directly recognized, if not endorsed by all. And yet it is distinetly a product not of nature, but of civilization. It is not "animal" but essentially human, like most of our vices.

No trace of it is to be found in any animal community, and very little among savages. It is one of the "flowers of civilization" and, at bottom commercial, "bourgeois." Instead of a sin of instinct, it is a sin against instinct, directly on the part of the female, indirectly on the part of the male.

To a woman it is a trade pure and simple, while the man has about as much right to urge his "appetite" as an excuse, as would one who turns from healthful food to glut himself upon garbage. That the exercise of the sexual function is necessary to the health of the male at any age is a pure delusion, while before full maturity it is highly injurious.

Prostitution is a crime against nature. The attitude of the anthropologist, the naturalist, towards it may be summed up in one sentence: "It needs must be that offenses come, but woe unto that man through whom they come." And yet it must perform some useful function, for it everywhere exists.

Another singular feature about it is its absolutely irrepressibleness and unmanageableness. Ecclesiastical, civil, and military authority have all in turn utterly proscribed it and repressed it with ferocious vigor, and at times all three have been united in one determined effort to root it out, as in the Papal dominions for nearly two centuries; but the utmost they could accomplish was to change its form and increase its extent. They simply learned, what we in Iowa have just been learning again in the costly school of experience, that "prohibition does not prohibit."

Nor does the attempt at "regulation" fare much better. From a careful study of all the authorities I could secure and observation of the actual condition of affairs in several of the European cities I am driven to the conclusion that the results of regulation are about as follows:

- 1. A small diminution in the number of registered prostitutes and a large increase in that of clandestine prostitutes; the decline of the brothel and the enormous multiplication of the grisette.
- 2. A marked increase in the number of men indulging in the vice, on account of diminution of fear of infection, and what is even more potent, removal of all risk of interference by the police, of arrest in some "raid," and the consequent possibility of publicity in the police-court.

In short it puts the stamp of safety and respectability upon the whole business for both sexes.

- 3. It diminishes the marriage-rate of the community by rendering concubinage in some form, safe, popular, and economical.
- 4. It increases the ratio of illegitimate births, by obvious causes. Paris, the Mecca of this system, has the highest illegitimacy-rate in the world, 26 in the 100 births or one-fourth of all. Finally, it does not even diminish venereal disease, first, because the most fruitful breeding-ground of syphilis and gonorrhea is not among prostitutes but among "clandestines," so-called "sempstresses," waiter-girls, chambermaids, etc., and "amateurs" of all descriptions, and secondly, because the most rigid and skilful inspection can find no trace of disease in a woman, who may develop well-marked primary or secondary symptoms before nightfall and infect a dozen men before

morning. In short, from the theological, the legal, and the philanthropic standpoint the case appears not only ruinous but well-nigh hopeless.

When, however, we turn and approach it from a medico-economic point of view its aspect alters completely and I venture to claim it as one of the grand selective and eliminative agencies of nature and of highest value to the community.

It may be roughly characterized as a safety valve for the institution of marriage. This, of course, does not imply "approval" or endorsement of the process, for though the escape of a certain amount of steam is beneficial to the engine, it is "a very cold day" for the steam that escapes.

It is simply a huge sewer, a garbage dump, a crematory, into which are hurled the least desirable elements of both sexes, degenerate men, and degraded women, for conversion into more useful and less odorous materials.

I think it would be hard to find a subject upon which there is a more "plentiful lack" of reliable information and data of real scientific value.

This is unavoidably inherent in the nature of the case for obvious reasons. After a brief but bootless search through the authorities, I decided to appeal directly to the only class of men who possess both the information and the training to qualify them to speak with authority. I accordingly sent out a number of letters, containing a list of questions, to the leading physicians of New York, Philadelphia, Boston, New Orleans, St. Louis, Chicago, San Antonio,

and San Francisco, also to a number of practitioners in smaller towns, thus including every section of the Union. Although the number of replies is small, yet there is such a substantial harmony through them all that they form at least a most suggestive "straw" to indicate the direction of the current of professional opinion on this question. And this straw assumes the dignity of an indicator when we further add, that these few were those who felt themselves competent to speak definitely out of over one hundred who replied to my letters and that the list included such names as Gihon, Parvin, Edson, Price, Hare, Bolton, Bangs, Bernays, Dudley, and Chassaignac.

The first point to be considered in an economic study of this question is the motive which induces women to enter this profession. By this term I mean, of course, the dominant motive, it is freely recognized that no *one* cause alone impels any woman to this pursuit.

The following is the average obtained from all answers upon this point:

Love of display, luxury, and idleness	42.1 pc	er cent.
Bad family surroundings	23.8	6.6
Seduction in which they were inno-		
cent victims	11.3	66
Lack of employment	9.4	6.6
Heredity	7.8	66
Primary sexual appetite	5.6	66
	100.0	

This makes a showing strikingly similar to that of the criminal class among men, who are recruited mainly from the idle and shiftless among all classes, and from the defective classes. These two causes, including heredity, accounting for nearly seventy-five per cent. in the above table. It may be regarded as emphatically a trade, chosen from love of idleness, of luxury, and absence of sense of honor, or decency. Even Du Chatelet, after asserting that over sixty per cent. are driven into it by seduction, desertion, and want, admits in a lucid interval "C'est le desir de se procurer jouissanses sans travailler qui est dans le premier rang de causes." Again "C'est la, vanité et le desir de briller." Bitter as is the scorn and contumely heaped upon the prostitute she deserves it all, for she has in the vast majority of cases deliberately sold her birthright not for pottage, but for champagne and tinsel.

In reply to the question what is the chief and what is the second cause of prostitution, the results are, from twenty answers:

	I.	II.
Love of display, etc	10	10
Bad family surroundings	4	10
Heredity	3	
Seduction	2	
Lack of employment	1	

Here the results are singularly uniform and strongly emphasize, the conclusions from the former table.

The next question relates to the class of society from which the mass of our prostitutes come, and I know of no point upon which popular impressions are more widely generally erroneous. The prevalent

view appears to be what might be described as the "W. C. T. U." one, that its priestesses are all the victims of man's lust and base deceit and drawn alike from the mansion and the hovel. Like most of the conceptions with which this body has blessed the world it lacks the support of facts.

Out of twenty-one answers to this question eighteen reply "lower," "lowest," and "poor and detective," "factory girls," or some equivalent term. One replies "lower middle" and two "middle."

Now as to the grade of education of these recruits, seventeen reply "very low," "uneducated," "analphabets," etc., and four reply "fair" or "average." This corresponds with the results of Du Chatelet, who found that the prostitutes of Paris practically all came from the laboring or artisan class, and especially from those whose lack of intelligence and persistence makes them mere day laborers, "roustabouts," as the modern term is. By an elaborate examination of their certificates, he also found that out of 4,470 prostitutes 2,332 could not sign their names (fifty-five per cent.), and 1,781 could sign "but badly," leaving only 110, or barely two and five-tenths per cent. who could write at all legibly.

In short, as a professional man of extensive opportunities for observation, once remarked to me, "I have seen and studied thousands of these women all over the Union, and have never been able to detect any difference between them, which was not the work of the milliner and the upholsterer." As another of my friends expressed it even more tersely, "Out of

thousands, I have never seen one with good table-manners."

There are of course exceptions to the rule, but the prostitute possessed of a spark of refinement, education, or intelligence, is extremely rare, and usually very soon either marries or becomes owner of an establishment, and in either case retires from active practice.

And just here I would like to say one word in correction of what I believe to be another popular error as to the personality of a prostitute, and that is that she is usually beautiful. The advocates of the seduction-theory even go so far as to declare that she must be, otherwise no one would be tempted to seduce her, which is a fair sample of their logic. From a somewhat extensive experience with women of this class in the general hospitals of London, Paris, and Vienna, and a systematic study of the physiognomies of thousands of them upon the streets of the above cities, and of New York, Philadelphia, and Chicago, I have no hesitation in declaring that a handsome or even attractive-looking prostitute is rare, and that the average of beauty is lower among them than in any other class of women. The only important exception to this statement is the unchaste class among actresses and artist's models; who are no real exception, as they are almost forced into vice from the extreme exposure and pressure of their occupation. Whatever other evils the "fatal power of beauty" may be responsible for, it has no more to do with prostitution than "the flowers that bloom in the spring." Men

do not go upon the street or to the brothel to gratify their artistic sense for beauty any more than to seek intellectual companionship, but to get "the pound of flesh" that their lust demands, and the most "popular" prostitute is the one who is best capable of filling this demand to the utmost.

Even the majority of the most fashionable members of the demi-monde, the mistresses of the wealthiest and most aristocratic "men-about-town," are creatures whom an anthropologist would trust about as far as he would a rattlesnake, and whom an artist would shudder to look upon. Here again is a point of resemblance to the criminal classes of whom the warden at Millbank Penitentiary declares that "a handsome face is a thing rarely seen in a prison, and a pleasing, well-formed face, never."

As everywhere else, so even here, beauty is a sign of purity and wholesomeness, a safe guide in nine cases out of ten.

The next question is, what class furnishes the largest proportion of its own members to the ranks of vice? In other words, what occupations seem to most favor this downward tendency? The unanimity upon this point is practically complete. Of twenty-two answers sixteen say "factory girls," "shop girls," "saleswomen," "waitresses," etc., and four say "domestic servants," and two "those too idle to have any occupation." In short, it is the women who are engaged in public occupations who are most in danger.

Again, we have the commercialization of women

as a powerful factor in the production of this vice. It is based upon a trade instinct, pure and simple. Space does not permit me to enter upon the subject here, but I wish to record my solemn and sorrowful conviction that the woman who works, outside of the home or the school, pays a heavy penalty, either physical, mental, or moral, and often all three. She commits a biologic crime against herself and against the community, and woman-labor ought to be forbidden for the same reason that child-labor is. Any nation that works its women is damned and belongs at heart to the Huron-Iroquois confederacy.

Now as to the much-mooted question of the life-expectation of the prostitute after she is fairly em-

barked.

The "Talmage" view has been loudly trumpeted abroad, and as for once, it is partially correct, there is little needs to be said. The average of twentytwo observers gives the life duration at nine years, nearly double the popular one, but short enough. The same method gives the death-rate as seventyfive per cent. greater than that of normal women of the same station, but the causes of this increase are markedly different from those usually not only popularly, but also professionally imputed. Every observer gives alcohol the first place as a factor, venereal disease comes second; morphin, cocain, chloral, etc., third; suicide fourth, irregular hours and life, fifth. Alcohol would thus appear to be doing as useful work among women as it is among men. It is one of our greatest "missionary" agencies, and unlike all others its "conversions" are usually permanent.

Last of all comes the question of the effect of this institution upon the propagation of the species. Do women of this stamp leave descendants? Very seldom.

The deduction from all the answers is that barely three per cent. of prostitutes bear children at all during the ten years of their career. The birth-rate of healthy married women during such a term at this age would be nearly 200 per cent. Like all other evils, prostitution is self-limiting. The reason for this sterility is obvious. Disease of the sexual organs, syphilis, "preventives" of every description, abortions, and infanticide, easily account for it. Of the children born alive, very few survive, from ignorance, disease, or neglect.

As to the proportion who marry, the answers vary widely, the average being 13.2 per cent., but upon the next point there is substantial agreement; viz., that those who do are practically sterile, the answers as to fertility ranging from "barren," "very sterile," "very low," to "unfavorable," "about 1.6 per cent."

The proportion who permanently reform is variously estimated at from "one in a million" to 30 per cent., but the average is low; viz., 6.8 per cent.

This is probably not far from correct, for even the managers of Bethels and reformatories for this class sorrowfully admit that the number who come under their care are but a very small proportion of the entire class, and even of these only a moiety are

permanently improved. The Secretary of a large Society of this sort (Mr. Talbot) estimates that in the eighty years previous to 1845 only 14,000 or 15,000 women had been within the walls of all these institutions in London, or less than 200 per year.

To sum up then from the female side of this institution, our conclusion would be that it is concerned principally with the most worthless varieties of women, the degenerates or criminals, and the idle, the mercenary, and shameless of the working classes, women in short, whom the community can well afford to spare.

That these women, when fairly in its grasp, are, practically, absolutely prevented from propagating their kind during their career, and rapidly destroyed if they remain in it. That very few marry, and those who do so are barren in a high degree; in short, it is an eliminative agency of high value and wonderful efficiency for first sterilizing and then rapidly destroying the worst specimens of the sex—women whose "reform" and child-bearing would be a curse to the community.

What now is the effect of this vice upon the men who indulge in it, and through them upon the community? Practically the same, namely, the sterilization of the unfit. The more one studies the veneral diseases, the more one becomes impressed with the conviction that their deadly virus is aimed, not at the life of their victim, but at his or her power of reproduction. In fact, both gonorrhea and syphilis are very seldom fatal in women and only exception-

ally so in men, popular and even professional impression to the contrary notwithstanding. But they are most effective sterilizers for a period varying from six weeks to six or seven years, and not unfrequently totally destroy the reproductive power. This is strikingly true of syphilis. Suppose a man becomes infected at a brothel. If married, any conception in the great majority of cases will terminate in a miscarriage, a still-birth, or the production of a child which dies of syphilis within six months of its birth. And this history repeats itself until the taint gradually dies out of the blood, a period of at least two years, under the promptest and most skilful treatment, but which, under neglect or with a later infection of the wife, may extend to five, six, or seven years. This may seem an overdrawn picture, but Tarnier declares that 85 per cent. of syphilitic children die before the sixth month. Kassowitz gives the percentage of children born of syphilitic parents, either still-born or dying within six months, at 55 per cent., and Sturgis reports that 71 per cent. of the children of such parentage, born in the Moscow Hospital die within that period. By and by the virulence of the poison dies down, a child is born that barely escapes with its life, another by a little wider margin, and so on till healthy children can be produced. But what of these who escape! Stunted, blear-eyed, pitiable, with sunken noses, opalescent cornea, scarred mouths, and notched teeth, they are degeneration incarnate. I have seen hundreds of these poor creatures in our

large hospitals, the oldest children of their families, literally victims of "the plague of the first-born," the first of three, five, even seven, or eight fetuses and children to survive the attack of the virus, and I have yet to see the one who had passed thirty years of age.

Tarnowsky reports a suggestive group of three couples infected by syphilis who produced twenty-two children; of all these there came only one healthy adult man. Syphilis is more merciful than the Jehovah of the Decalogue, for it usually suppresses the second generation before it acquires consciousness, and permits no third generation to appear to be "visited with the iniquities of the fathers." Like all other diseases it is self-limiting in the individual or the species.

But what of the other far milder and commoner venereal disease. Until recently considered a mere trifle, medical opinion has undergone a positive revolution in regard to it. Though apparently cured in a few weeks, its infection may linger for years and slowly but surely destroy the reproductive glands in both sexes. Many of our most serious ovarian diseases are now traced to it, and it is known to be one of the most frequent causes of sterility.

More than one of the leaders of medical thought goes so far as to send the despairing message: "It is doubtful whether gonorrhea is *ever* cured!"

Here again, "justice may move with a leaden foot, but she strikes with an iron hand."

To sum up, the whole mechanism of prostitution is

an engine of deadliest efficacy in sterilizing and ultimately destroying the worst elements of both sexes. To say that it also involves fearful and widespread suffering and damage to innocent women and children, would be as true as it is pitiable and harrowing, but I firmly believe that this is much less both in extent and painfulness than is usually stated, and is from a purely economic standpoint only, far overbalanced by the benefit resulting to the race. "A companion of fools shall be destroyed" is no vengeful threat, but a simple statement of a stern, necessary natural law. Pain, disease, and death are hard to bear and harder to look upon, but they are among the greatest benefactors of the race.

The only way to check its action is to reduce to its "anatomically necessary" limits, the class upon which it is sure to act. Men should be taught the sacred duty and true dignity of reproduction; that any attempt to avoid this duty brings its own punishment. That their sexual powers belong not to themselves, but to the race, and every exercise of them must result ultimately in either a pregnancy or syphilis. That they cannot hope to enjoy the privileges of manhood and shirk its responsibilities.

Women should be taught to trust their instincts, for in them the maternal impulse is stronger than life itself. That like every other natural instinct it is of highest benefit, not only to the race but also to the individual. That any attempt to thwart it, or even failure to give it proper development, will result in either dwarfing or decay.

The freedom of intelligent, refined conversation upon sexual subjects ought to be broadened, it should no longer be considered indecent to speak plainly. Most of the flavor of obscenity which hangs about the discussion of sexual matters is due to this very restriction. No excuse or danger should be left for boys and girls on the ground of ignorance of this important function. In other words, intelligence, altruism, true refinement, should be promoted by every possible means and Nature will continue to assist us by emphatically discouraging their opposites.

Above and beyond all we should foster, glorify, deify if necessary, the one instinct in man's bosom which can master the sexual, the highest, the holiest, the strongest of which he is capable,—his love for the one woman who is, or is to be, all the world to him. Once touch this spring and he is safe. Well may all of clearest, and deepest vision among us, the poets, never weary of singing its praises. The age of chivalry should be brought back in nobler, truer form.

Lust laughs at opposition and exults in danger, but sinks ashamed at the whisper of love. Impress upon every man not his own danger, but that of his wife that is to be, of his children yet unborn. Nay, further, make him to see that the last insult he can offer to the one for whom he would cheerfully lay down his life, is to make in, the burning words of the apostle, "her members the members of a harlot" and prostitution will disappear from the face of the earth.

CHAPTER XI.

THE VALUE OF PAIN.

PAIN is one of the essential conditions of progress. Not merely in the sense of being part of the friction which necessarily accompanies all movement, but as a vital precedent of all possibility of movement. Ask any biologist what is the first and most important property of living matter, and he will tell you that it is "irritability," the power of responding to stimuli or impressions. Touch with a needle point the most beautiful and brilliant crystal and you get absolutely no response; turn to the grayest and flabbiest bit of ditch-water animal-jelly that you can find and he moves himself away from the steel at once.

He can feel, therefore he lives. And if he feels at all he must be able to feel pain as well as pleasure. Nay it is even more important that he should perceive the disagreeable stimulus than the agreeable, for the former needs to be moved away from, while the latter does not. Leave him capable of only pleasurable sensations and he will be destroyed inside of an hour.

In this earliest form the powers of sensation and of responding to impressions are combined in the same cell, but as the organism becomes more complex, more extensive and powerful movements are called for, and special cells are set aside for contractile purposes alone, leaving to the surface cells the duty of sensation only. Later it becomes not merely a question of escape but also of retaliation, and a central office to combine the muscle-strands in orderly military movements is needed and the ganglion-brain is called into being. In the mean time the surface cells have been dividing up the work of feeling among themselves; some have educated themselves to catch the finest variations in the light-rays, some confine their entire study to the sound-waves, others to the changes of temperature, while the vast majority of them simply refine upon their original powers of contact-perception or touch. Thus out of the simple possibility of discomfort arise the five senses, their muscle standing-army and their joint judicio-executive brain. Pain is the mother of the mind, and muscle is its father.

Nor can this powerful factor in the creation of the body-organism be permitted to "rest upon the seventh day," like the Jahveh of Genesis, when its work is apparently completed. The possibility of the continuance of life absolutely depends upon its incessant activity. Cut the nerve which connects any part or organ with the conscious brain and you place it in serious peril at once. Precisely as if you blindfolded a man and then turned him loose in an enemy's country, or as if you cut the wire which connected an outlying military post with headquarters. You may cut the motor nerve which conveys orders from the brain, or, what is equivalent, destroy the "motor

center" of the part in the brain with comparative impunity, as far as the nutrition of the limb is concerned; it loses the power of motion, but even the muscles retain their bulk for a long time in spite of lack of exercise and the general health of the member remains perfect.

But it is far otherwise when sensation is destroyed. The benumbed hand or foot goes stumbling along like a blind man, cutting itself here, burning itself there, rasping its surface against a hundred objects, and from every merest scratch an ulcer forms. So long as all its cells are in health and vigor and can live on the standard rations of the rest of the body, issued to them through the blood-vessels, all goes well, but the moment any of them fall below par from injury or otherwise, and cannot notify the central commissariat of the fact, they fall into the plight of a baby trying to live on government rations of hard-tack and saltbeef. That heat and swelling about a wound which we term "inflammation" is merely a forced and special feeding-up of the neighboring cells to enable them to breed rapidly and fill the gap, and while in excess it is a source of danger in itself, in its absence there can be no healing.

Observe it is not the loss of the power to pass the signal "All's well" that is injurious, it is the inability to report discomfort. Not the absence of all sensations, but the absence of painful ones that is fatal.

For instance, in paralysis of the aged, one of the chief dangers to life is from the formation of ulcers

about the back and hips due solely to pressure against the mattress, and hence known as "bedsores." The peculiar danger of these is first that, sensation being abolished, they will form without the patient's knowledge, and in neglected cases will often attain the size of the palm of the hand and a depth of an inch or more before they are discovered, and second, that communication with the brain being cut off, little or no inflammation occurs and they are extremely difficult to heal. It is no uncommon thing to see them six inches in diameter and an inch deep, and yet with scarcely enough inflammatory reaction around them to redden the skin at their edges. This absence of pain and consequent inflammation noe only impairs healing-power, but also deprives the general system of one of its chief barriers against the absorption of the products of decay, and a fatal bloodpoisoning is extremely apt to occur.

A peculiar illustration of the uses of pain is afforded by that dread disease leprosy. Here one of the earliest symptoms is the loss of sensation in a hand and arm or foot, while the muscular power is unaffected. Many a victim has first discovered his condition by severely burning or cutting himself without feeling pain. In one dramatically tragic case, a planter who supposed himself in perfect health thoughtlessly caught a heated lamp-chimney which was falling, and didn't know it was burning him until the smell of his scorching fingers attracted his attention! What is the result? In a very short time tiny cracks, bruises, and scratches develop all

over the hand or limb affected, these rapidly grow into ulcers and either heal very slowly or steadily deepen until fingers, toes, nay even hands and feet are completely amputated by them, or the limb is so drawn and crippled by the great scars that it becomes almost useless. There are, of course, active processes of destruction at work as well in the disease, but a great part of the terrible deformities of the limbs produced by leprosy are due solely to this negative destruction of sensation and its consequences. In modern hospitals it is found that by keeping lepers in bed, in comfortable wards and protecting their extremities against injury and irritation in every possible way, their lives may be very greatly, if not almost indefinitely, prolonged.

But there is also another way in which pain is of marked benefit in case of disease or injury, and that is by securing rest for the part affected. The agony of an inflamed joint, for instance, is an imperative order to the muscles controlling its movements to keep it perfectly still and motionless. And the order is usually strictly obeyed. So important does nature consider it that, by a curious transference, the pain of a diseased hip-joint, for instance, will be felt by the sufferer in the knee and ankle, so as to keep the whole limb at rest. This function of pain is beautifully illustrated in the lower animals. A broken leg in a dog or a deer, for instance, will be so carefully protected against the pain of movement, supported against the other limb, rested against the side of the body and swung along with such a gentle movement, with its toe just trailing on the ground, that the results are often equal to the best that we can boast with all our splints and bandages. Truly, pain is nature's splint.

A similar protective influence is exerted over the inflamed lung by the acute distress of pleurisy.

"But," says some one, "what of those diseases in which pain is the principal evil, in which no structural changes can be found in any way proportionate to the agony endured, what of neuralgia, of blinding 'sick-headache,' of sciatica? Is not the pain the disease in these cases?" By no means. It cannot be too emphatically asserted that pain always means something. It does not occur simply as an accident of chance, still less for the purpose of developing patience, or as a "means of grace," but as a pointed reminder that something is going wrong. Neuralgia is the ery of the nerves for more sunlight, "sickheadache" a protest against eye-strain. In themselves comparatively harmless, as danger-signals they are simply invaluable. Hence the seeming paradox, that those who suffer most, often live the longest; the sensitiveness of their nerves absolutely compels them to halt at the very threshold of danger.

Pain is literally the price of life. And this brings us to the question: "What is pain?" abstractly considered. "What is the difference and what the relation between it and pleasure?" We are all perfectly clear in our own minds on these questions, in the concrete, from personal experience, but how shall we define our conception? On careful ultimate analysis

we are driven to the somewhat unexpected conclusion that pain and pleasure are really both vibrations of one and the same chord. That the very sensitiveness which makes the one possible, necessarily makes the other also possible. That the only way to prevent painful impressions, from our environment, is to destroy the mechanism which permits the reception of pleasurable ones. In short, life without pain would necessarily be life without pleasure. The old mythic poets made a shrewd guess at this scientific truth when they described the life of Olympus as "colorless," "joyless," and sang of the "twilight of the gods." And Kipling's prophetic insight has caught the same ray, in his magnificent parable, the greatest poetic conception of the century, "The Children of the Zodiac."

More than this, the two sensations are not merely vibrations of the same chord, but varying degrees of the same vibrations. The difference between them is one not of kind but of degree. Almost any pleasurable sensation can be transformed into a painful one by simply increasing its intensity, and many painful ones into pleasurable merely by decreasing their intensity or changing the circumstances.

The instantaneous coolness of a piece of ice placed upon a parched tongue is delicious, but let contact be prolonged only a few seconds and the very same "coolness" becomes intense discomfort. The similar "transformation" of the warmth of a Yule log is another illustration which of course suggests itself. A flood of golden sunlight is the most pleasing sight

which falls upon our retina, but throw the rays directly into the eye and a dazzling pain takes the place of the former enjoyment. A gentle friction of the body-surface is an agreeable sensation to nearly every one, but increase the pressure or rapidity a little and it produces a burning pain. The sensation of "sweetness" is so keenly enjoyable that it has become in connection with "light" a critical synonym for the highest good, and in childhood an abundance of "sweeties" or "candy" is temporary Paradise; yet how many adults are there in whom a very few spoonfuls of simple sugar will not promptly convert this delight into loathing, and how few to whom the "oversweet" taste of glycerine, chloroform, or saccharine is not positively repulsive?

In short, pain is *any* sensation raised above a certain intensity. And even the degree of this intensity varies widely with the individual and the circumstances.

On the other hand, it is well-nigh impossible to draw a line of demarcation between, for instance, the pangs of hunger and the pleasant cravings of appetite, between an intolerable itching and a pleasant tickling sensation, between the joy of longing and the bitterness of "hope deferred."

"But," asks some one, "even granting that pain is necessary, is it not merely a necessary evil, and are not its general effects purely disastrous?" Quite the contrary, the effects of pain in improving and developing both the individual and the social organism have been just as powerfully beneficent as in creating them.

It is, of course, obvious that pain or the dread of it has been the chief factor in the development of the means of escape from it, and of the myriad mechanisms in beast, in bird, and fish that subserve this end.

It is no mere coincidence that the most timid creatures are also the fleetest, the trout, the deer, the hare, the swallow, for instance, while their fleetness again is the only thing that enables them to afford such rare beauty of form and coloring. The fin of the fish, the wing of the bird, the legs of the deer, owe their development in large measure to hunger and fear.

There is also a pretty direct connection between the sensitiveness of animals and the degree of their intelligence. The indifference of the turtle to pain is largely concerned with his limited cerebral capacity, the thickness of the pig's hide is a good index of his mental power, and the stupidity of the sloth is closely connected with the dulness of all his perceptions.

But it is when we come to consider the potency of pain in social development that its value stands out most clearly. The earliest political unit is a group formed for mutual protection against hunger, cold, and wild beasts. Danger compels men to herd together, and all the social virtues are fostered by it.

The rowels of nature's most powerful spur, hunger, are continually reddening the flanks of the primitive community. The Apostle's scathing arraignment of the Cretans, "whose god is their belly," would literally apply to every savage tribe—and many a civilized one. Hunger is one of the mainsprings of prog-

ress. At its imperative command the flint was chipped into the arrow-head, the dart, the spear. In its honor the net was woven, the hoe was made, and the soil broken. To appease its cravings the wild bull is broken to the yoke, the forests are felled, the ditch is dug through the marsh.

On its errands the ship is launched on the perilous deep and the band sent out upon the war-path. Into its service have been impressed the winds of heaven, the steam-wreaths of the cauldron, and the glittering shafts of the lightning. It is the real Aladdin's lamp of civilization. The ceaseless westward flow of the human stream and march of the "star of empire" has been at the behest of its Genii. Whether it be born of a barren soil and a cruel sky or of the pressure of over-population, it has played a leading part in moulding the destinies of the nations.

In the fall of every world-empire from Assyria to Rome the conquering race has invariably come from a mountainous or barren land, or from a sterner sky.

And still to-day the nations of the bleakest belt of the temperate zone, where the struggle with soil and climate is severest, the Scotch, the English, the Dutch, and the North-Germans are over-running the whole of the inhabitable globe and bid fair to far outdo Alexander by more peaceable and far more stable means.

To what is the Scotchman more deeply indebted for his world-renowned, "long-headedness," enterprise, and frugality than to his stony soil, his barren muirlands and his "dour" climate, to say nothing of the kilted Highlander on one side of him and the English gauger on the other? Have the dogged perseverance, the quenchless love of liberty, and the sturdy honesty of the Dutchman which have written him such a brilliant record on the pages of modern history no connection with his ceaseless struggle to beat back the cruel tooth of gray old ocean from his very hearthstone? An old historian has quaintly suggested one reason for the extraordinary exploring-enterprise of those matchless old sea-falcons, our Viking ancestors, in the statement that they were "certaine of lighting upon no more cheerlesse place, than that whence they sette forthe."

Indeed it is almost an axiom of anthropology that the white race cannot flourish where the snow never lies. Below a certain degree of latitude it invariably degenerates. The stinging kiss of the Frost-king is absolutely necessary to the perfect development of the blood-red flower of Aryan civilization.

In fine, hunger, cold, and poverty are veritable blessings in disguise, and even to-day prompt a large proportion of our productive activities. There is the soundest physical basis for the spiritual beatitude, "Blessed are the poor."

Are the benefits of pain limited to the purely physical, the commercial, and the military aspects of man's development? Far from it, for in the intellectual and moral realms its laurels are brighter yet. I venture to claim it as the very father of science. The earliest dawn of knowledge in the mind of our primitive ancestors was a recognition of the health-

fulness or harmfulness of all objects as articles of diet. A knowledge gained by bitter experience. To this day a baby's first and chief criterion of everything about him is his mouth. Into that rosy opening is thrust impartially, just as far as it will go, everything that his chubby paws can clutch from the contents of the coal-bucket to the painted monkey on a stick. And his earliest mental concept divides the universe simply into two divisions, that which tastes nice and that which does not.

Some of you may have seen a picture by the idealist Watts which represents our first parents seated side by side upon a sunny sea-beach. A number of empty clam, oyster, whelk, and other gaudily colored seashells are strewed about them, the evident remains of a primitive "clam-bake" in which the couple have just been indulging. There is a pained and regretful expression upon the countenance of the man, and he presses his hand over his distended stomach in a most expressive fashion, while his wife watches him in surprise and uneasiness. Some of the shell-fish have evidently been out of season or of a poisonous variety. The title of the picture is brief but expressive: "The Birth of Experience." And after some such fashion unquestionably did human experience and human wisdom begin. And more progress was due to the bitter episodes than the sweet, for the impression made by them was incomparably deeper. The school of experience is proverbially a "hard" one, and "sadder but wiser" has become a house.

hold word. Literally "the fear of the Lord is the beginning of wisdom."

Just as most of the implements of peaceful industry were originally weapons of war, so many of our most valuable scientific discoveries and inventions have their origin in the bitter stress and makeshift of acute discomfort. For instance our entire knowledge of the structure and workings in health of this wonderful body of ours had its birth in the study of its condition in disease. Pathology is the mother of both physiology and anatomy. By a singular oversight several of our organs are still described in our text-books to-day not as they appear in health or during life, but as they appear after death or in positively diseased conditions. For so many centuries our attention had been called to them only when diseased or upon the post-mortem table that we had unconsciously come to regard these as their normal appearances. The first and only thing that induced primitive man to concern himself with his interior arrangements was their causing him discomfort whether apparently primary as pain or fever, or secondary as hunger or frost-bite, was promptly set down as due to the activities of more or less numerous evil spirits. To cure these evils it is necessary to appease the spirits; sacrifices are made, and a ritual is born. Thus the earliest gods of the race are deified discomforts. And the Jehovah of the Decalogue, the "angry god" of the Puritan still bears sad but distinct traces of some such origin. A distinct class quickly springs up whose sole function

it is to propitiate or even at times repel these troublesome influences. This caste, formed for the simple but comprehensive purpose of relieving discomfort or averting disaster, both individual and tribal, is primarily medical in the broadest sense of the term. Not only is personal healing required of it, but also state medicine, sanitary science in the widest sense. But as most of the disturbances he is confronted with are attributed to spiritual agencies, his work rapidly takes on a priestly character as well. The shaman, conjurer, rain-doctor, or voodoo is neither priest nor physician—but the common ancestor of both, as his Indian name of "medicine-man" indicates to this day. And from this singular and ofttimes grotesque individual spring not only two out of our three "learned professions," but also, incredible as it may seem, most of our scientists as well. Thus part of the bitterness of the warfare between theologians and scientists may be accounted for on the ground that it is a family feud. To aid him in the individual part of his duties, the relief of aches, of fevers, of dysenteries, our physician-priest presses into his service the herbs, the roots, the berries of the surrounding copses, or the mineral earths of the cliffs, and from these erude beginnings botany and chemistry with their descendants biology and geology are born. To this day a number of our common plants still bear the names given them from their supposed medicinal virtues: such as "boneset," "liverwort," "sorrel" ("sore heal") "feverfew," etc. For assistance in the tribal part of his functions, the prevention of drought, the securing of plentiful crops, and assuring against defeat in battle, he naturally appeals to the only heavenly bodies visible to him, and astronomy with its daughters, physics and navigation is brought into being.

Many if not most of our best known stars and planets still bear as scientific titles the names given them when prayed to for aid, or used in the construction of horoscopes.

Even as the greedy quest of the philosopher's stone led to many an invaluable chemical discovery. far more "golden" to the race than the discovery of its object would have been, or as the wild and eager search after the fountain of youth developed continent after continent of undreamed-of richness and beauty, so the desperate shifts and vigorous efforts to escape the sharp spear of pain have won for the race a knowledge, a power, and a happiness beyond their wildest dreams.

As to the uses and value of pain in the moral realm, these have been so fully and constantly insisted upon by prophets of every creed that nothing more than the merest allusion is needed here. Indeed its importance has, if anything, been exaggerated, but even upon the soberest view of the subject it must be rated very high.

For instance it is obvious that without pain or the possibility of it there could be no true courage, no patience, no self-denial or devotion, without hardship, no endurance or fortitude, without tribulation, no faith.

It is not too much to say that without suffering no true character or virtue could be developed any more than muscle and vigor without hunger and cold; that the choicest of the saints are and ever have been "they that have come up out of great tribulation."

Pain is by no means the only or even the chief influence in molding the destiny of man, indeed as our next contention will be, its antithesis, joy, is equally necessary and even more potent, but it is the keen and biting chisel under whose edge alone can the figure of the perfect man be hewn out of the lifeless marble.

CHAPTER XII.

"LEBENSLUST."

Joy is the sunshine of the soul. And like all other sunshine it is both a chief cause of growth and a most powerful antiseptic, a staunch friend of life and a deadly enemy of fungi, miasms, and decay generally. And yet men have hidden themselves from it in caves and dark places of the earth as if it were a pestilence. Yes, and are still hiding. By one of those curious errors of indirection so common in human experience the mere fact of pleasure being so inherently and strikingly attractive has made men hesitate to openly avow it as an aim or object. In the first place, it was altogether too childish to say that you did a thing simply because you liked to do it, or wanted something merely because it would give you pleasure. It might be perfectly true, but one must formally give some more "grown-up" reason than that. In the second place, the pursuit of joy carried to extremes becomes hurtful, therefore—with that charming logic which has been so brayed into our ears in these "prohibition" days,-joy is not to be pursued at all,-officially, though fortunately the actual practice of the race has been far different. Hence most creeds and systems

of morality or other guides of conduct have felt called upon to solemnly warn humanity against pleasure of all kinds, sometimes even against women as the chief means thereof, apparently in the philosophic hope that by vehemently insisting that the race shall go ten miles against its instincts, it may possibly be (actually) got to go the one mile which is really desired. But this line of action, though well-meatn and perhaps fairly effective, has one serious defect. It places so large a part of the joy-seeking activities of mankind completely outside of the pale of its sanction, that these come to be regarded as sinful in themselves, to be indulged in only with an air of sneaking apology and regarded as mere, at best evil but necessary concessions to the "animal part" of man's nature. Hence when a man "plunges into pleasure" he usually leaves his reason and his sense of moral discrimination behind him; there is no such thing as a righteous, moderate indulgence, it's all wrong, and the only question is, how much can he stand without injuring his constitution or his business reputation. Consequently, nearly all of the avowed pleasure-seeking which one sees is either idle luxuriousness or harmful dissipation, and a certain sort of stigma comes to attach to any one who ventures to advocate enjoyment as a legitimate aim of human conduct. But even at the risk of being accused of favoring and perchance practising all sorts of improper things from selfish hedonism to "licentiousness," I must declare that the message of the Fifth Gospel is unmistakable upon this point.

Joy is not only perfectly legitimate, but one of the most wholesome and elevating aims which can be found. As an incentive to vigorous, healthy development, both moral and physical, it takes its place beside the other great motive impulses, Love, Courage, and Hunger. We have already seen what a valuable guide to conduct our natural instincts and the pleasure that attends their gratification are, not merely in the physical but also in the mental and moral realms. So that in the race generally and the child especially a very large part of our activities will be found to have joy as a motive. As a spring of human action the relation between it and pain or discomfort is most singular and often puzzling. Whether more actions are determined by the fear of pain or by the hope of joy would be a question worthy of the dialectic of the schoolmen. The question clears somewhat when we remember that pain and pleasure are simply opposite extremes of the same scale of sense-vibrations. Moreover, both being purely relative, the mere escape from or cessation of pain becomes a pleasure by contrast, and the deprivation of pleasure a pain. So that we may be striving to gain or retain pleasure and avoid pain in one and the same action, and which most powerfully impels us would be a question for the gods to decide.

The relation between the two would perhaps be most nearly expressed figuratively by saying that pain is the stern monitor who drives us into the path of safety and well-being, while pleasure is the smiling guide who leads our steps along it. Gaunt

Hunger may drive us to the board, but kindly appetite presides at it after it is spread. Pain may be the primary cause of the first performance of most of our vital functions, but their continuation and harmonious repetition is chiefly determined by pleasure. And yet the pleasure, appetite, is merely a mild and bearable degree of the pain, hunger,—which brings us to the conclusion that pleasure is the great complement and normal successor of pain, and that most actions determined originally by pain or the fear of it, which do not become pleasurable by repetition, are physically injurious and ethically immoral. So that joy becomes Nature's stamp of approval.

Duty, if determined by rational and wholesome ideals, ultimately becomes a pleasure, and healthful courses of action, whether didactic or industrial, originally involving much effort and even repulsion, become in the end pleasurable when formed into "good habits."

Most things which we like to do (all which we like by instinct) are beneficial to us, to a greater or less degree. From a biologic point of view could we imagine the existence of a species whose preferences and pleasurable instincts were on the side of harm? How long would such a species survive in the struggle for existence? Of course, this motive like any other must take its place in the parliament of impulses and submit to the vote of the majority. It has, however, full rights upon the floor, and the burden of proof is in every instance in its favor. The mere fact that we take pleasure in a thing or

action is good presumptive evidence of its value. While pain, and a good deal of it, is absolutely necessary to vital progress, yet far the larger, and more frequent and constant part in this is played by pleasure. The value of pain emphatically lies in its avoidance and its developing effect upon the mechanisms to that end, and while up to a certain point beneficial, beyond that it becomes injurious and even disastrous. Long continued submission to bodily pain, from physical inability to escape or failure to relieve, undermines strength, destroys appetite and nutritive powers, deranges the nervous system, and retards recovery in a most serious manner. And so far from "purifying" and elevating the moral sense, it is much more apt to blunt or distort it, to ruin the temper, and destroy self-control. The "great sufferer" makes a most pathetic and instructive appearance, but like some other martyrs, in a majority of instances, does not improve upon closer acquaintance. She is apt to become selfish and exacting, and the chief credit, that she is usually entitled to, is that she is no worse under the circumstances.

So that we have every reason not merely for recognizing pleasure as an aim, but for trusting it as a guide, subject of course to revision by our other impulses and aims. Here, as everywhere, morality, sanity, consist in balance. The great advantage of this recognition is the powerful aid which it gives in making goodness positive and aggressive, instead of negative and defensive. Let it once be admitted that joy is righteous in itself and legitimate as an aim, and a

long step has been taken towards making righteousness joyful and duty a pleasure. The deplorable and disastrous attitude upon this point taken, for the most part, by Christianity in general and by Puritanism in particular, needs no extended notice here. It is sadly familiar to all of us both personally and historically, and has been utterly condemned not merely by modern science, but by the common sense and healthy instincts of humanity in all the ages. It is not merely erroneous but profoundly immoral, and with the very best of intentions has east a deeper gloom over, and brought well-nigh as much suffering upon, the human race, as any of the vices it was intended to check.

The gloomy pessimism of the gospels and epistles, as to the believer's prospects and hopes in this world, "They that will live godly in Christ Jesus shall suffer persecution." "For if in this life only we have hope, we are of all men most miserable," "In this world ve shall have tribulation only," "Woe unto you when all men speak well of you," " Mortify the flesh with the affections and lusts," and scores of similar jeremiads are bad enough, but they have been "bettered" by the Church in all ages since. The simplest statements have been distorted and even omissions turned to account. We have been gravely informed that Jesus never smiled though he is recorded to have often wept, and "For every idle word that men shall speak they shall give an account in the day of judgment," has been interpreted to forbid jesting and light-hearted conversation of every description.

There is no more saddening page of the history of mankind than that which records the results of stoning one of the greatest of the prophets of the Most High. From the denial of the holiness of joy, have come the essential meritoriousness of self-denial and suffering, the righteousness of gloom, the piety of self-deprivation and torture, the sanctity of dirt, the holiness of ignorance, and the whole dance of delirium and carnival of unreason which has at last died down, thank Heaven, to a few, feeble infantile prancings in strict evangelical circles, around the pillory in which are exhibited those chief and most potent snares of the Evil One, dancing, cards, and the theater. The merest reference to the facts is sufficient argument against the position, and indeed modern orthodoxy has at last recognized the error of it and modified its "interpretations" of Scripture to meet rational views. Even from the innermost circle of the evangelicals comes the message, cheering both in its eminent good sense and frank, Saxon bluntness, "Many Christians think themselves pious when they're only bilious."-(Bishop Vincent.)

And yet in spite of this great object-lesson of the utter failure of reprobation and denunciation, a chorus of protests arises at once on every hand, the moment it is even suggested to officially recognize joy as an aim and pleasure as a guide in conduct. And this in spite also of the further fact that both biology and medicine have abundantly proved that three-fourths of the actions and things which give us pleasure tend to the advantage of both the individual and the race. The great dread seems to be that an era of license, of self-indulgence will be thereby established at once. But a glance at this fear will show it to be really unfounded.

In the first place this change brings joy, as it were, from the outlaw of a despotism, to a citizen of a republic. Instead of being less amenable to law and reason than before, it is made more so. The mere recognition implies the presence of an element of reason and utility which can be estimated and its legitimate weight and limits defined as accurately as that of any other righteous motive. Instead of regarding it as an impulse which will inevitably at times, be yielded to without reason and in defiance of authority, its indulgence is freely granted, so far as it can defend itself on rational grounds. To use a somewhat changed metaphor, the robber-baron has become a member of parliament.

Secondly, any pursuit of joy carried to excess becomes a failure, judged solely from an esthetic standpoint, promptly defeats its own aims in fact.

Take a mere gastronomic indulgence in the pleasures of sweetness, and beyond very moderate limits, it promptly results primarily in blunting the tongue and clogging the palate to the verge of disgust, and secondarily in a colic or an attack of biliousness. The penalties of excess are much greater than the pleasures of indulgence. An enjoyment of minutes is matched by the discomfort of hours or even days, and from a purely hedonistic standpoint the balance is

heavily upon the side of moderation. And in those cases in which discomfort is not actually induced, excessive indulgence soon blunts or even destroys the capacity for pleasure. In fact moderation and control are absolutely necessary to successful self-indulgence.

These of course are mere truisms, but it is really surprising into how highly moral a course of conduct, the intelligent pursuit of pleasure alone, with an eye to permanence and the many-sidedness of man's needs in this regard, will lead us. Indeed several celebrated systems of morals have been based upon this impulse alone, under different names, from the epicureanism of early days to the "refined selfishness" of Bentham, and the "utility" of Spencer. Morality is not authoritative but essential, not artificial but natural and self-existent, and a large measure of it will be attained by the intelligent and effective conduct of life from any natural standpoint whatever, whether utilitarian or esthetic, instinctive or devotional, spiritual or material.

We are so apt to judge every impulse or tendency by its most striking results, in other words, by its extremes. The instant that a "life of pleasure" is mentioned, the image, that involuntarily springs up in our minds, is that of the idler or the rake. And yet either of these judged by even the briefest "life" standard of pleasure alone, is a colossal failure. Pure idleness, though a delightful relief after arduous toil, whether bodily or mental, has the feeblest staying powers of any pleasure that can be mentioned, indeed it is not a pleasure at all, except by contrast. And the contrast fades out with wonderful rapidity. Enforced beyond a few hours or days, it becomes absolutely intolerable and the most excruciating torture which the wit of man can devise.

The moment a man succeeds in reaching the "leisure-class," he sets to work to get rid of his idleness almost as energetically as he did before to obtain the privilege of it. The nobler sort of the "upper classes," the real "aristocracy," of every land, whether hereditary or otherwise, take their duties and opportunities seriously and work just as hard and self-denyingly as any "laboring class" in the community, simply to make their lives tolerable to themselves. While the baser sort make just as much of a business of pleasure-hunting as any banker does of money-lending or farmer of stock-breeding, and get not a whit more pleasure out of it. If they succeed in their "business," they enjoy life, but so does any man who succeeds in his occupation, no matter what it is, and the percentage of "bankruptcies" is high among them. Pleasure is like several other things in the world, the surest way not to get it is to aim directly and deliberately at it. As for the rake and the hard drinker, instead of getting the most pleasure out of life, no one with his equal opportunities gets less. There is a wild delight in sowing "wild oats" but a painful laboriousness about the reaping of them. And they are a "sure crop" and apt to "bring forth thirty-fold."

Considered as a pleasure-crop, they are a ghastly

232

failure. We have the unanimous testimony to this effect not merely of the moralists, but of the rakes, the libertines, and the wine-bibbers themselves. And when these two classes of worthies agree, the point may be considered established. In the case of winedrinking, for instance, leaving out of account its value as food and medicine, and considering it simply as a means of pleasure, the man who succeeds at it is not the guzzler, but the very moderate drinker. say nothing of the "difference in the morning," the heavy drinker so quickly blunts his palate and drowns his finer senses, that bouquet, flavor, sparkle, play of color, vintage, etc., are utterly lost upon him. The poorest possible way to really enjoy wine or whiskey is to drink hard. The man who gets the most pleasure out of drinking, not only infinitely in the course of his life but even at the very moment of imbibing, is the man who drinks his burgundy or port by the glass and his whiskey by the ounce, and not the one who gulps his champagne by the bottle and his whiskey by the pint. No one gets less pleasure out of alcoholic beverages than the drunkard-except the total abstainer. Therefore they naturally unite in abusing wine and the moderate users thereof. Every natural joy-instinct, when it has attained a reasonable and legitimate gratification of itself, has fulfilled its function and promptly disappears, leaving its place to be filled by the attraction of the next need of the organism. No man ever got drunk by instinct. He has in the first place to "learn to like" the taste of all but the weakest liquors, and even then, after drinking a moderate amount, he is much more unpleasantly affected, in nine cases out of ten, by the fullness in his head, the thickness in his tongue, and the vagueness in his legs, than he is pleasantly affected, by the taste of more whiskey. If men would always stop drinking just as soon as they ceased to enjoy the taste of their wine or whiskey, there would be much less drunkenness than at present. Indeed, the habitual drunkard can hardly be said to be urged on by real pleasure-impulses at all. Certainly not by any natural ones, but by a morbid craving first for excitement and then for delirious self-forgetfulness.

One of the most frequent objections urged against pleasure as an aim is its extraordinary evanescence. In the famous lines of Burns:

"Pleasures are like poppies spread,
You seize the flower, its bloom is shed,
Or like the snow-flake on the river,
A moment white, then melts forever."

But as a matter of fact this is one of its chief advantages. It is so irresistibly attractive that if it did not promptly fade upon realization, poor, weak humanity would be in great danger of being incessantly impelled in one direction to its ultimate undoing. But every instinctive pleasure is capable of "gratification" which extinguishes it completely, for the present at least, and leaves the field clear for attraction by the other needs of the organism. There will nearly always be found to be much that is artificial and unnatural in any craving which leads to excessive indulgence of any sort. Natural desires fade

like the rose, in the very act of fruition. "The full soul loatheth the honeycomb,"—but unfortunately not always the wine-cup. Man's natural pleasure-impulses and desires, if followed as they present themselves in their turn and each one permitted to take precedence of the others, according as its need is greatest, would lead him extraordinarily close to the pathway of health, not only physically, as we have seen in the chapter upon instinct, but morally also.

The most serious misjudgments of pleasure are, we believe, based chiefly upon an oversight and a misunderstanding, an oversight of the inherent many-sidedness, one impulse taking the place of another so easily and frequently that no one can lead to excess. To employ an apparent paradox, man is literally saved from pleasure by pleasures. The misunderstanding arises from a lack of comprehension of the real nature of pleasure.

As to just what is the essential characteristic, which in all cases makes a sensation or action pleasurable, we are still entirely in the dark. We do not even know what invariable attribute distinguishes it from the painful, indeed by most of our modern psychologists this entire group of sensations are classed together in what is termed the "pleasure-pain" series. About all that we can say definitely is that both are due to variations in the intensity of stimuli and appear to be opposite ends of the same scale of vibrations. Hence, "Variety" is literally "the spice of life." Nor does there appear to be any constant

relation between the intensity of the stimulus or the suddenness of its variation and its pleasurable or painful effect, except that violent stimuli and abrupt variations seem to produce painful rather more often than pleasant sensations. Probably the nearest approach to a definition and distinction, and one which certainly applies in a very large percentage of cases is that of Marshall, that pleasure is the result of any stimulus the response to which is easy and adequate and draws only upon such energy as is already stored up in the organism. When the response to the stimulus is inadequate and difficult and draws, as it were, upon the energy needed for the very life of the tissues, then pain results. This rule will not apply, by any means, in all eases, but it will probably go further than any other characterization that has been attempted.

And when we come to apply this definition in our discussion, the problem alters greatly. If pleasure includes not merely actions and responses which are generally easy and require the expenditure of but little energy, but also those involving the liberation of large amounts of energy, providing this has already been stored up, so to speak, then will the reproach of "lotos-eater" be removed at once. And this definition is strikingly true in practice. A life which is "all bed, beer, and skittles," as the old phrase goes, is by no means the ideal life of pleasure; on the contrary, the keenest and most lasting pleasures of life are those which result from the most strenuous exertions, the most patient and skilful generalship, and

the assumption of the greatest possible risks. Men love success far more than ease, and honorable risk than dishonorable safety.

To say that the intelligent pursuit of pleasure will inevitably or even usually land men in either the idiocy of idle luxury or the insanity of dissipation, is a foul slander upon humanity. The pleasure of merely plucking and eating ripe fruit however luscious, is tame and insipid beside the triumph of stalking the elk or bringing the wild-boar to bay. To roll along the level highway upon the softest and most luxurious of carriage-cushions, is not to be compared for a moment to the delight and exhilaration of a wild dash across country, risking, if needs be, limb and life at every fence and brook simply in order to "ride straight." I can conceive of no exhilaration more delightfully intense, outside of warfare, than that of the heaving bound beneath you of the thoroughbred hunter as he rises to the six-foot hedge and you crane forward to see how wide the ditch on the other side may be. The hiss of the water along the half-buried gunwale of the reeling sloop, is a far sweeter music than the rippling of a thousand tiny wavelets upon the sandy beach, as you lie basking in the sun.

The thoroughly manly man enjoys not merely ease and luxury but also and far more, adventure, enterprise, danger, laborious work even. Ask any true sportsman and he will tell you that his real pleasure lies in the excitement, the strain and the tactics of the chase, not in the eating of the game. The hardest work of the world is done from sheer love of it, not

from a sense of duty. And almost anything that a man can work vigorously at and with a fair measure of success, he will enjoy no matter what his feelings towards it when he began. We begin by working to earn a living and end by loving our work, if it be only respectable. There is a pleasure in doing whatever we do easily and well, no matter how unattractive it may be in itself. Hence most men really enjoy their occupations, no matter how hum-drum, and are very proud of the way they perform their daily tasks.

The attitude of most men and all animals toward their life-work is not that of a bitter and irksome struggle for the mere means of existence, but of vigorous and invigorating, joyous activity. The "curse of Adam" is an almost unmixed blessing. Vigorous and continued activity is not merely a stern necessity of existence, it is a means of progress and a source of constant enjoyment as well. The "struggle for existence" is severe, but it is joyous also, and successful until it is ended by the Great Rest-Bringer.

Life is long and full of action and color. Disease is short and death painless and instantaneous. "Weeping may endure for a night, but joy cometh in the morning." Joy has as marked a preponderance over grief in the natural world, as good has over evil. Always excepting that part of it discovered and reported upon by that strangely-assorted pair of deponents, the modern realist with his filth-worship, and the ancient orthodox theologian with his devilworship. No one sees more of the sorrowful side of life than the family physician. And yet no one will

more unhesitatingly affirm, that in ninety-nine cases out of a hundred, even after the most terrible destruction of limbs, of senses, of usefulness, after the crushing bereavement of those dearer than life itself, in a brief period the balance of life adjusts itself again in favor of, first, tolerability, then of joy. Not that the beam rises to the same angle as before, by any means, though it does this in a surprisingly large proportion, but that it does reach the level and a little more. No man who faces the situation bravely and works hard and honestly at the task which lies within his powers, need fear permanent unhappiness.

The edge of grief or disappointment is most mercifully dulled by the flight of time, the satisfaction which comes of honest work well-done, never fails. If there be anything of which both the physician and the Darwinist are firmly convinced, it is the wonderful adaptability of both the human and the animal organism. Given the bare possibility of existence which includes either the power of vigorous effective exertion, or of free communion with one's kind, and happiness will ultimately result in the vast majority The more closely and lovingly we study any class of animals or stratum of human society, the more firmly we become convinced that happiness and not misery is the rule. And not by a bare majority either, but overwhelmingly. Life in all is a struggle, but it breeds a superb set of healthy, blameless appetites, the natural gratification of which is an abundant reward for every exertion. The very strenuousness of the struggle gives it an exhilaration as long as it is successful, and when it ceases to be so death comes swiftly and usually painlessly. And we must remember that in the lower animals there is practically almost no fear of death, in the human sense. It is doubtful whether they can even distinctly conceive of it and if they could, having never invented a theology, they would have little reason to dread it excessively.

The hunted animal flees not "for its life," for it is probably beyond its powers to imagine itself ceasing to exist, but to escape the pain which it believes the teeth or weapons of its pursuer may infliet, or very often in sheer, instinctive dread of his approach. "Despair" and surrender are alike unknown to it, and when it can run no longer it turns to bay and dies fighting, probably feeling the fangs of its captors but little more than soldiers do the mortal wounds received in the thick of battle.

And I frankly confess that my own firm conviction is that a large proportion of the "wretchedness" and "unhappiness" of the world about us and below us, both human and animal, has been "read into" it unconsciously by our nobly mistaken sympathy for our fellow beings. We should suffer both physically and mentally under such circumstances, and so must they.

In short, while as keenly alive as ever to wrong and suffering and as strenuous to right the one and relieve the other wherever he sees them, the Darwinist is in large measure freed from that crushing conception of the preponderance of suffering and disappointment in the life of the world, the "Weltschmerz" which exerts such a powerful influence over our views of life and destiny.

Nor does this joy of living fade or even waver in the face of death. "Life is short," the moralist warns us, but what of that? If it be brave, vigorous and joyous while it lasts, how could it be improved by being made longer? Death is simply the end of life, not its destruction or reversal, and come soon or late, it cannot rob us of a single joy experienced or undo a single triumph won. "The lily of a day" was the fairest thing the sun shone upon, and triumphed and will be remembered as such, "e'en though it fall and die that night."

Life is short, but it is as long as we are; aye, and if we live to threescore and ten, as long as our desires. To know that it must end sometime need not in any way detract from our rational enjoyment of it while it lasts. So long as it continues it is good, and when it ceases, so do we, as individuals. The happiest life, if it had no prospect of ending, would become terribly monotonous. The only thing which could cast a permanent gloom over life would be the fear of its indefinite continuance.

The bucket brings up precisely a bucketful, whether it be lowered into a hogshead or an ocean, once or a hundred times, and we get out of life precisely what we are able to contain and would get not a drop more if we lived to be a thousand. And we human buckets are usually filled to the limit of our utmost possibilities before we are fifty, although we may keep on

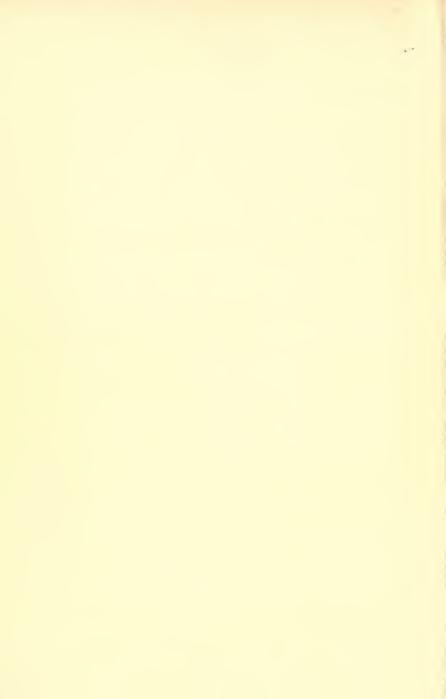
fondly imagining ourselves to be hogsheads. Unless our capacity could go on increasing indefinitely, which it obviously does not, we could get no more joy out of life in a thousand years than in seventy, except in the matter of memories. If such an increase could occur it would practically amount to the loss of our identity. And from the point of view of the effectiveness and progress of the race, we had much better do this by death and allow a new generation to take our place.

As for a future life in spheres celestial, we are simply in the Socratic attitude, that as we have not a scrap of ponderable evidence as to its character or even existence, we should be most irrational to either dread it or long for it.

We are fully content to

"Live long and happy
And in that thought die,
Glad for what was."

Content to rest and to live in our memories, our descendants and our "works which do follow us," but unafraid of any awakening.



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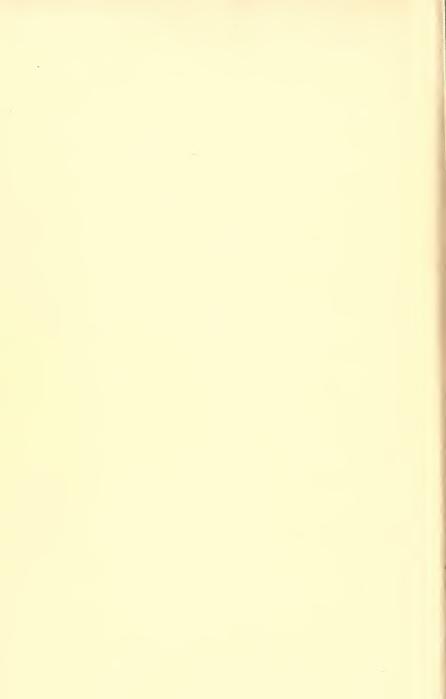
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